











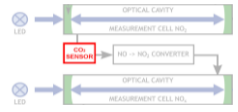






					ICAD (IC) Subtypes					
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	High Grad	Outdoor	
Instruments										
ICAD NO2 / NOx Instruments in 19" Rack Housing										
ICAD-NO2-210	ICAD-NO2-210 IN SITU NO2 MONITOR > Direct nitrogen dioxide (NO2) measurement with ICAD method, NO2 calibration gas not required > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 43.5 cm³ • Weight less than 10 kg • Front side display • Suitable for mobile measurements > System health on-board diagnosis and control interface, accessible via WiFi > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PTFE tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6	GENERAL: This is the single channel, "NO2 only" version of the ICAD instrument in 19" rack format. Unlike the dual channel instruments ("D" in item name), it only measures NO2, not NOx. TIME RESOLUTION: 5 s standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.	REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A] RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NO2] • Services [IC-SERV-NO2-EXT] & [IC-SERV-EXT]							
ICAD-NOX-210D	ICAD-NOX-210D TWO CHANNEL IN SITU NOx MONITOR > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 43.5 cm³ • Weight less than 10 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PTFE tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6	GENERAL: The "D"-version is a dual channel instrument in 19" rack format which is able to measure NOx by simultaneous measurement of both NO2 and NO. TIME RESOLUTION: 5 s standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.	REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A] RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT]							
ICAD-NOX-210DE	ICAD-NOX-210DE TWO CHANNEL IN SITU NOx/CO2 MONITOR > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 43.5 cm³ • Weight less than 10 kg • Front side display • Suitable for mobile measurements > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision ~2 ppm, accuracy ~10 ppm with regular offset calibration • Range 0 - 2.000 ppm > Including ICAD cooling option: Cooling + heating to temperature stabilize measurement cell in warm (up to 35° C) and cold environments with an air to air cooling / heating system, measurement cell temperature stability ~0.2° C (cooling option required for the combination with the CO2 IR-sensor) > Included: Large Zero air cartridge • PFA aerosol filterholder incl. filter • 5 m PTFE tubing • Filter Keys • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6	GENERAL: The "DE"-version is an instrument for emission measurements with "Plume Chasing" or "Points Sampling" setups. The internal software directly derives NOx and NO2 emission factors for vehicles. The instrument is like the "D"- version a dual channel instrument in 19" rack format with additional CO2 sensor. From the measured gases and its ratios, the system derives directly emission factors of NOx and NO2. The system comes always with a cooling option. TIME RESOLUTION: 2 s standard setting for emission measurements. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging. However, short time resolution is recommended for "Plume Chasing" to cover the dynamics during sampling.	REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A] RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT] • Plume Chasing measurement probe system [IC-ACC-PROBESYS]							
ICAD-NOX-210DT	ICAD-NOX-210DT TWO CHANNEL TWIN INLET IN SITU NO2 MONITOR > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Two inlets to measure at two sampling lines in parallel with two measurement cells > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 43.5 cm³ • Weight less than 10 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PTFE tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6	GENERAL: The "D"-version is a dual channel instrument in 19" rack format which is able to measure NOx by simultaneous measurement of both NO2 and NO. TIME RESOLUTION: 5 s standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.	REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A] RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT]							









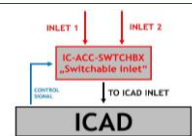

Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
ICAD-NO2-210L	<p>ICAD-NO2-210L IN SITU NO2 MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none"> > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Time resolution up to 1 s • Precision up to 0.12 ppb @1 s & up to 0.02 ppb @60 s • Range: 0 - 2000 ppb > Increased sensitivity resonator cell configuration > Active ICAD LED light source cooling with peltier for best LED temperature stability (better 0.1 °C) > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 66.5 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PFA tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NO2-200]. The "L"-version features and enhanced resonator which is optimized for higher sensitivity for applications where low NO2 concentrations need to be measured with high precision.</p> <p>Enhanced Resonator: Almost twice as long measurement cell and high grade mirrors. The LED peltier cooling increase measurement accuracy and reduce zero point drift.</p> <p>TIME RESOLUTION: 30 s in standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NO2] • Services [IC-SERV-NO2-EXT] & [IC-SERV-EXT]</p>		•			•	
ICAD-NOX-210DL	<p>ICAD-NOx-210DL IN SITU NOx MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none"> > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Time resolution up to 1 s • Precision up to 0.12 ppb @1 s & up to 0.02 ppb @60 s • Range: 0 - 2000 ppb > Increased sensitivity resonator cell configuration > Active ICAD LED light source cooling with peltier for best LED temperature stability (better 0.1 °C) > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 66.5 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PFA tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NOX-200D]. The "L"-version features and enhanced resonator which is optimized for higher sensitivity for applications where low NOx concentrations need to be measured with high precision.</p> <p>Enhanced Resonator: Almost twice as long measurement cell and high grade mirrors. The LED peltier cooling increase measurement accuracy and reduce zero point drift.</p> <p>TIME RESOLUTION: 30 s in standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT]</p>			•		•	
ICAD-HONO/NO2-210L	<p>ICAD-HONO/NO2-210L IN SITU HONO AND NO2 MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none"> > Direct nitrous acid (HONO) and nitrogen dioxide (NO2) gas measurement with ICAD method, HONO and NO2 calibration gas not required > Time resolution up to 1 s > Precision HONO: Up to 0.3 ppb @1 s & up to 0.04 ppb @60 s • Range: 0 - 500 ppb > Precision NO2: Up to 0.6 ppb @1 s & up to 0.08 ppb @60 s • Range: 0 - 2000 ppb > Increased sensitivity resonator cell configuration > Active ICAD LED light source cooling with peltier for best LED temperature stability (better 0.1 °C) > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > GPS for geolocation and time synchronisation (with IC-ACC-GPSEXT) > Power connection: 12V DC > 19" rack housing • Size 43.8 x 13.2 x 66.5 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • PTFE aerosol filterholder incl. filter • 5 m PFA tubing • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NO2-200L], but operating on another wavelength range (UV) to detect nitrous acid (HONO). NO2 is still detectable since it also provides significant absorbance in the UV wavelength range. The LED peltier cooling increase measurement accuracy and reduce zero point drift.</p> <p>TIME RESOLUTION: 30 s in standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-HONO] • Services [IC-SERV-HONO-EXT] & [IC-SERV-EXT]</p>		•			•	
ICAD NO2 / NOx Instruments in UV resistant Polycarbonate IP64 housing									
ICAD-NO2-210-M	<p>ICAD-NO2-210-M IN SITU NO2 MONITOR, IP64 HOUSING</p> <ul style="list-style-type: none"> > Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > UV resistant Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 43.6 x 13.2 x 30.0 cm³ • Weight -7 kg • Suitable for mobile outdoor measurements > Included: Zero air filter system - Regular (115ml) • PTFE aerosol filterholder incl. filter • 5 m PTFE tubing • 2 m LAN cable with IP68 connector > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NO2-200], but with rugged polycarbonate housing optimized for mobile and outdoor application.</p> <p>TIME RESOLUTION: 5 s standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.</p> <p>ZERO AIR FILTER SYSTEM: Regular capacity (115ml) is included. Indicate if a switch to a High capacity (400ml) filter is requested.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co2 IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NO2] • Services [IC-SERV-NO2-EXT] & [IC-SERV-EXT]</p>		•			•	

Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
ICAD-NOX-210D-M	<p>ICAD-NOX-210D-M TWO CHANNEL IN SITU NOX MONITOR, IP64 HOUSING</p> <ul style="list-style-type: none"> > Direct nitrogen dioxide (NO₂) gas measurement with ICAD method, NO₂ calibration gas not required > Nitrogen oxide (NO_x) measurement with conversion of NO to NO₂ > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > UV resistant Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 43.6 x 13.2 x 30.0 cm³ • Weight less than 10 kg • Suitable for mobile outdoor measurements > Included: Zero air filter system - Regular (115ml) • PTFE aerosol filterholder incl. filter • 5 m PTFE tubing > 2 m LAN cable with IP68 connector > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NOX-200D], but with rugged polycarbonate housing optimized for mobile and outdoor application.</p> <p>TIME RESOLUTION: 5 s standard setting for delivery. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging.</p> <p>ZERO AIR FILTER SYSTEM: Regular capacity (115ml) is included. Indicate if a switch to a High capacity (400ml) filter is requested.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • ICAD cooling option [IC-CON-COOL] • ICAD integrated co₂ IR-Sensor [IC-CON-CO2SENS] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT]</p>			•			•
ICAD-NOX-210DE-M	<p>ICAD-NOX-210DE-M TWO CHANNEL IN SITU NOX/CO₂ MONITOR, IP64 HOUSING</p> <ul style="list-style-type: none"> > Direct nitrogen dioxide (NO₂) gas measurement with ICAD method, NO₂ calibration gas not required > Nitrogen oxide (NO_x) measurement with conversion of NO to NO₂ > Time resolution up to 1 s • Precision up to 0.40 ppb @1 s & up to 0.05 ppb @60 s • Range: 0 - 5000 ppb > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT) > Power connection: 12V DC > UV resistant Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 43.6 x 13.2 x 30.0 cm³ • Weight less than 10 kg • Suitable for mobile outdoor measurements > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NO_x LDV and HDV emission factors (EURO VI to IV) > Integrated CO₂ IR-Sensor (two wavelength measurements): Relative precision -2 ppm, accuracy -10 ppm with regular offset calibration, range 0 - 2.000 ppm > Including ICAD cooling option: Cooling • heating to temperature stabilize measurement cell in warm (up to 35° C) and cold environments with an air to air cooling / heating system, measurement cell temperature stability -0.2° C (cooling option required for the combination with the CO₂ IR-sensor) > Included: Zero air filter system - Regular (115ml) • PFA aerosol filterholder incl. filter • 5 m PTFE tubing • Filter Keys • 2 m LAN cable with IP68 connector > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 	<p>GENERAL: Like [ICAD-NOX-200DE] but in the weatherproof IP64 housing. Includes an instrument cooling and CO₂ sensor.</p> <p>TIME RESOLUTION: 2 s standard setting for emission measurements. Can be changed using the Web UI. Use higher values for increased accuracy by true internal spectral averaging. However, short time resolution is recommended for "Plume Chasing" to cover the dynamics during sampling.</p> <p>ZERO AIR FILTER SYSTEM: Regular capacity (115ml) is included. Indicate if a switch to a High capacity (400ml) filter is requested.</p>	<p>REQUIRED ARTICLES: WIFI Stick [ACC-WIFIUSB] • External power supply [ACC-PWR-8A]</p> <p>RECOMMENDED ARTICLES: GPS [IC-ACC-GPSEXT] • Operator Display Tablet [ACC-TAB] • PTFE aerosol pore filter [IC-SPARE-FILT] • PTFE aerosol depth filter [IC-SPARE-PREFILT] • Zero air filter system - Regular capacity [IC-SPARE-ZERO115] • Zero air filter system - High capacity [IC-SPARE-ZERO400] • Maintenance [IC-MAINT-SET] • Spare part set [IC-SPARE-SET-NOX] • Services [IC-SERV-NOX-EXT] & [IC-SERV-EXT] • Plume Chasing measurement probe system [IC-ACC-PROBESYS]</p>	 		•	•		•
ICAD-UAV	<p>Add-on: Customized, lightweight version of ICAD instruments for UAV applications.</p> <ul style="list-style-type: none"> > Additional price for this special configuration > instrument weight ~6.5kg (for ICAD-NOX-200D-M) > Aluminium housing • Size: 40 x 30 x 17 cm³ 	Available for standard ICAD configurations (non-"L" versions).	<p>REQUIRED ARTICLES: ICAD-NO₂-200-M IN SITU NO₂ MONITOR [ICAD-NO₂-200-M] or ICAD-NOX-200D-M TWO CHANNEL IN SITU NOX MONITOR [ICAD-NOX-200D-M]</p>		•	•			


					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	High Grad	Outdoor
OPTIONAL INSTRUMENT CONFIGURATIONS (TO BE ORDERED WITH THE INSTRUMENT)									
IC-CON-CO2SENS	ICAD INTEGRATED CO2 IR-SENSOR > Extends the ICAD system by measurements of CO2 concentrations > Sensor mounted within the instrument, no additional external parts > Including online vehicle emission analysis software with the “Plume Chasing” principle • Integrated and synchronised into ICAD software > Specification and properties: IR intensity measurements at two wavelength • Time resolution: Up to 1 s • Relative precision: ~2 ppm • Accuracy: ~10 ppm with regular offset calibration • Range: 0 - 2000 ppm	Extension for integrated CO2 sensor needed for emission measurements (NOx/CO2) or emission plume detection. Required for [ICAD-NOX-200DE] & [ICAD-NOX-200DE-M].	REQUIRED ARTICLES: if combined with one of the following instrument ICAD-NO2-Z10, ICAD-NOx-210D, ICAD-NO2-Z10-M, ICAD-NOx-210D-M, ICAD-NO2-Z10DT-M, cooling option for temperature stability of CO2 sensor necessary [IC-CON-COOL]						
IC-LED1-COOL	ICAD NO2 HIGH GRADE LED COOLING OPTION > integrated in ICAD System: active ICAD LED light source cooling with peltier for best LED temperature stability (better 0.1 °C) > increase measurement accuracy and zero point drift.	Compatible with ICAD RACK instruments. Already included in ICAD “HIGH GRADE Version” instruments. By ordering, the LED cooling option it will be integrated in the ICAD measurement cell. It provide stable LED temperatures for optimal measurement precision at changing ambient temperatures, especially for warm temperatures (above 25 °C). This is also beneficial for the overall measurement precision of the ICAD.		NOT APPLICABLE					
IC-LED2-COOL	ICAD NOx HIGH GRADE LED COOLING OPTION > integrated in ICAD System: active ICAD LED light source cooling for both measurement channels (NO2 and NOx) with peltier for best LED temperature stability (better 0.1 °C) > increase measurement accuracy and zero point drift.	Compatible with ICAD RACK instruments. Already included in ICAD “HIGH GRADE Version” instruments. By ordering, the LED cooling option it will be integrated in the ICAD measurement cell. It provide stable LED temperatures for optimal measurement precision at at changing ambient temperatures, especially for warm temperatures (above 25 °C). This is also beneficial for the overall measurement precision of the ICAD.		NOT APPLICABLE					
IC-CON-COOL	ICAD COOLING OPTION > To be configured for ICAD Instrument: ICAD cooling + heating option to temperature stabilize measurement cell in warm and cold environments (-10 °C to 35 °C) > Air to air cooling/heating system > Measurement cell temperature stability -0.2 °C to 35 °C	By ordering, the cooling (air to air peltier unit) option it will be integrated at the ICAD analyser back plate. It is mandatory for ICAD instruments with integrated CO2 sensor [IC-CON-CO2SENS] to provide stable temperatures for optimal measurement precision at higher ambient temperatures (above 24 °C). This is also beneficial for the overall measurement precision of the ICAD and extends the ambient temperature working range of the instrument.							

MEASUREMENT COMPUTERS

PC-DE	MEASUREMENT COMPUTER - DESKTOP PC > Windows 11 Pro installed and optimised for Airyx instrument measurement applications > Installation and configuration of measurement and (if included) evaluation software packages. > Robust Dell tower PC with min 8GB RAM, min 512GB Harddrive and min. Intel i5 Processor > Delivered with keyboard, but without monitor	If a measurement computer is ordered with a Airyx instrument, the required measurement software (e.g. SKY-SOFT-*) will be installed and preconfigured on the computer at Airyx GmbH. Same applies if software extensions (e.g. SkySpec evaluation package SKY-EVAL-*) are ordered • The system will be pre-configured as a plug-and-play setup.							
PC-NB	MEASUREMENT COMPUTER - NOTEBOOK > Windows 11 installed and optimised for Airyx instrument measurement applications > Installation and configuration of measurement and (if included) evaluation software packages. > Robust Dell Notebook with min. 8GB RAM, SSD Harddrive	If a measurement computer is ordered with a Airyx instrument, the required measurement software (e.g. SKY-SOFT-*) will be installed and preconfigured on the computer at Airyx GmbH. Same applies if software extensions (e.g. SkySpec evaluation package SKY-EVAL-*) are ordered • The system will be pre-configured as a plug-and-play setup.							
PC-NBHP	MEASUREMENT COMPUTER - NOTEBOOK - HIGH PERFORMANCE > Windows 11 Pro installed and optimised for Airyx instrument measurement applications > Installation and configuration of measurement and (if included) evaluation software packages. > Robust Dell Notebook with min. 8GB RAM, min. 512GB SSD Harddrive and min. Intel i5 Processor	If a measurement computer is ordered with an Airyx instrument, the required measurement software (e.g. SKY-SOFT-*) will be installed and preconfigured on the computer at Airyx GmbH. Same applies if a software extension (e.g. SKY-EVAL-*) is ordered • the system will be pre-configured as a plug-and-play setup • In the "HIGH PERFORMANCE" configuration a fast (i7 processor with 16GB RAM will be used); recommended for Open Path systems and SkySpec applications with calculation intensive data processing (going beyond the Airyx standard software packages)							


					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	HighGrad	Outdoor
EXTENSIONS AND ACCESSORIES									
ACC-TAB	OPERATOR WIFI CONTROLLER (10" tablet size) as controller interface for Airyx ICAD or SkySpec Compact. Android OS, pre installed apps and configurations for instrument control. > Includes: rugged frame protection, USB-C hub > WIFI and LAN connection to the instrument	Preconfigured Android tablet with shock protection for fast and easy control of ICAD and SkySpec Compact Instruments, especially for field measurements. Preconfigured for simple application e.g. of "Plume Chasing" measurements with [ICAD-NOX-200DE] or [ICAD-NOX-200DE-M]. Simple operation of instruments with touch screen. For mobile car applications, e.g., Plume Chasing, we recommend the [ACC-TAB-MNT] for stable mounting of the tablet in the car cockpit in compliance with traffic regulations.	RECOMMENDED ARTICLES: Car tablet mounting [ACC-TAB-MNT]		•	•	•	•	•
ACC-TAB-MNT	TABLET MOUNT CAR > Mount to fix the tablet (10"-13", e.g. [OPERATOR DISPLAY TABLET]) in the car > Length of metal arm: 56.5 cm > Will be mounted to front seat base screw which is present in any car from any brand	Enables mounting of Airyx tablets in the car cockpit in compliance with traffic regulations for mobile applications, e.g., Plume Chasing.					•		
IC-ACC-SDCABLE	ICAD SERIAL ADAPTER CABLE Adapter cable for ICAD (IP68) to RS232 serial data connection (D-Sub 9) for serial data communication via standardised Bayern Hessen data protocol • Length 2 m • Including RS232 to USB adapter	Data cable to transmit data from ICAD via serial connection. USB adapter for alternative connection with USB port of a PC is included.			•	•	•	•	•
IC-ACC-ST1M	PTFE AIR SAMPLING TUBING - 6 mm DIAMETER • PER 1 m (cut on ordered length)	Standard sampling tube made of inert PTFE • If ordered with an instrument, the length will be added to the tubing length already included with the shipping • Interchangeable for Sample Air tubing and Plume Chasing Measurement probe system tubing.			•	•	•	•	•
IC-ACC-TPIECE	PVDF T-PIECE TUBING CONNECTOR - FOR 6 mm DIAMETER	T-connector piece to connect three 6 mm air sampling tubing's • Used for example in setup of tubing for Plume Chasing Probes			•	•	•	•	•
IC-ACC-CONNECTOR	PVDF TUBING CONNECTOR - FOR 6 mm DIAMETER to connect two tubings	streight-connector piece to connect two 6 mm air sampling tubing's • Used for example ito connect tubings			•	•	•	•	•
IC-ACC-PROBESYS	PLUME CHASING MEASUREMENT PROBE SYSTEM > Setup for gas sampling on a car with two air inlets (right and left) > Two inlets merged to one sample line (incl. T-piece gas connector) • incl. 5 m extra PTFE tubing [IC-ACC-ST1M] > For installation on the front bumper of a car with cable ties (included) or clamps • simple adjustment to every vehicle width > Flexible probe to avoid injuries	Sampling probe for mounting at the front of a Plume Chasing measurement vehicle • Includes all required tubing to perform on-road Plume Chasing measurements of NOx emissions factors with the ICAD instrument. Adjustable width (170 cm to 220 cm) and front end in relation to bumper. The double probe (right and left) has the advantage to make emission measurements independent of the exhaust position. Both inlets are merged with a T-piece [IC_ACC_TPIECE]. Sample position optimised for best signal strength.					•		
IC-ACC-GPSEXT	EXTERNAL GPS RECEIVER MODULE > Weatherproof u-blox 8 system with 5 m GPS cable • Serial data communication and connector to ICAD instruments > Automatic integration into ICAD measurement software • GPS position is stored for each data point • GPS time is used for instrument time synchronisation > Magnetic for easy mounting • Operation down to 0° C	External GPS receiver with matching connector for easy extension of ICAD instruments, especially for mobile applications, e.g., Plume Chasing.			•	•	•	•	•
IC-ACC-SWCHBX	ICAD 2 CHANNEL MULTIPLEXER: SWITCHABLE SAMPLE LINE BOX > Extension for ICAD systems > Automatic switching between two sampling lines with electromagnetic valve during measurement procedure > Two separated sample lines, two aerosol filters and data cable included	Extension for automated sampling from two different sources • Package includes additional inlet on ICAD housing and external switching box with remote controllable valves.			•	•	•	•	•
ACC-WIFIUSB	WIFI USB MODULE (Dongle)	External USB Wi-Fi module, externally connected to all ICAD variants or SKY-COMPACT-XXX instruments • Only this specific WIFI dongle is suitable for the Airyx instruments • For Wi-Fi data communication between instrument and any Wi-Fi device (e.g. [PC-] or own device).			•	•	•	•	•

Product overview of Airyx GmbH








Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
ACC-PWR-8A	EXTERNAL POWER SUPPLY - 100 TO 240 V - 12 V / 8.5 A IP68 connector configured for Airyx instruments.	Power supply for Airyx instruments with IP68 connector configured for Airyx instruments • Input: 100 V to 240 V • Output: regulated 12 V / 8.5 A			•	•	•	•	•
ACC-PWR-7A-IP	EXTERNAL POWER SUPPLY - 180 TO 240 V - 12 V / 7.5 A IP67 power supply and connector configured for Airyx instruments.	Power supply for Airyx instruments in IP67 housing with IP68 connector configured for Airyx instruments • Input: 100 V to 240 V • Output: regulated 12 V / 7.5 A			•	•	•	•	•
ACC-PWR-15A-IP	EXTERNAL POWER SUPPLY - 180 TO 280 V - 12 V / 15 A IP67 power supply and connector configured for Airyx instruments.	Power supply for Airyx instruments in IP67 housing with IP68 connector configured for Airyx instruments • Input: 100 V to 240 V • Output: regulated 12 V / 15 A			•	•	•	•	•
ACC-PWR3	12 V POWER CABLE EXTENSION IP68 - 3 m	3 m extension 12 V connection between power supply and instrument • PUR outdoor cable with IP68 connectors on both sides • Can also be used to connect LiPo battery packs [ACC-BATPACK].			•	•	•	•	•
ACC-PWR5	12 V POWER CABLE EXTENSION IP68 - 5 m	5 m extension 12 V connection between power supply and instrument • PUR outdoor cable with IP68 connectors on both sides • Can also be used to connect LiPo battery packs [ACC-BATPACK].			•	•	•	•	•
ACC-PWRX	12 V POWER CABLE EXTENSION IP68 - CUSTOM LENGTH Price: 40 € + 6 €/m (Example price for 10 m)	Custom length extension 12 V connection between power supply and instrument • PUR outdoor cable with IP68 connectors on both sides. Flexible length, 50€ + 5€/M • Can also be used to connect LiPo battery packs [ACC-BATPACK].			•	•	•	•	•
ACC-PWR1.5BE	12 V POWER CABLE IP68- 1.5 m - BLANK END suitable for connection of 12V battery or 12V power supply	1.5 m connection between instrument and arbitrary 12 V power supply • PUR outdoor cable with IP68 connector on the instrument side • Other end with blank wires for flexible assembly.			•	•	•	•	•
ACC-PWR3BE	12 V POWER CABLE IP68 - 3 M - BLANK END suitable for connection of 12V battery or 12V power supply	3 M connection between instrument and arbitrary 12 V power supply • PUR outdoor cable with IP68 connector on the instrument side • Other end with blank wires for flexible assembly.			•	•	•	•	•
ACC-LAN2	LAN DATA CABLE IP68 - 2 M	2 m LAN cable to connect Airyx instruments to an external PC • PUR outdoor cable with IP68 connector on the instrument side. Not for ICAD instruments in the rack, there a normal LAN cable is included and sufficient.			•	•	•	•	•
ACC-LANX	LAN DATA CABLE IP68 - CUSTOM LENGTH PUR Outdoor cable CAT 7 Price: 60€ + 7€/m (example price for 10 m)	Custom length LAN cable to connect Airyx instruments to an external PC • PUR outdoor cable with IP68 connector on the instrument side • Flexible length, 90 € + 10 €/m Not for ICAD instruments in the rack, there a normal LAN cable is included and sufficient.			•	•	•	•	•
ACC-PWR3CAR	12V POWER CABLE FOR CAR CIGARETTE LIGHTER IP68 - 3 m, plus adapter cable to connect 12V buffer battery	3 m power cable for connection of Airyx instruments to a 12 V cigarette lighter in a car • connectable additional 12 V power source (battery) as 12V buffer to avoid power cuts when car power is off • PUR outdoor cable • IP68 connector on instrument side.			•	•	•	•	•

Product overview of Airyx GmbH








					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	High Grad	Outdoor
ACC-BAT-50Ah	<p>LIPO BATTERY 12 V/50.4 Ah IP67 - PELICASE</p> <p>> Included: 5 A charger</p> <p>> Included 1.5 m power cable for Airyx instrument connection (shipped separately)</p> <p>> 3.37 kg</p> <p>> Rugged Peli 1150 case (24 x 19 x 11 cm³)</p> <p>> This item will be shipping from battery manufacturer directly</p> <p>> This item is only available in Europe</p>	<p>Battery pack for instrument power supply in remote areas • IP67 • 3.37 kg • Allow -15 h of ICAD operation • 3 IP67 power connectors • Battery is directly shipped from the company producing the battery for Airyx • Batteries can only be sold within Europe due to transport restrictions.</p>			•	•	•	•	•

					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	HighGrad	Outdoor
MAINTENANCE EQUIPMENT AND SPARE PARTS									
SPARE-TSENS-DX	DIGITAL TEMPERATURE SENSOR FOR MONITORING > Digital sensor address selectable = 0, 1, 2, 3	1 x digital ADT temperature sensor for monitoring. Internal used in Airyx instruments • On micro printed circuit board with 30 cm connection ribbon cable • Digital I2C-adress is selectable (0, 1, 2 or 3) • Also used in older instruments (instead of [SPARE-TSENS-SPD]) to control spectrometer temperature • Direct connection to internal Airyx controller board.			•	•	•	•	•
SPARE-PCEM1	ICAD / SKYSPEC-COMP EMBEDDED MEASUREMENT PC INCL. 256 GB SSD > Windows 10 IoT installed and optimised for measurement applications > Installation and configuration of measurement software included > Incl. 4 Gb RAM > Incl. 256 GB SSD hard drive	Replacement of internal embedded PC (piTX) in Airyx instruments incl. RAM and SSD hard drive			•	•	•	•	•
IC-SPARE-ZERO400	ZERO AIR SYSTEM - HIGH CAPACITY > Generates zero air (e.g. NOx & HONO free air) > For zero point measurement (ICAD) > With 2 filter cartridges: Activated coal + desiccant > High capacity with 400 ml in each cartridge > For external connection	Large size allow longer maintenance intervals of typ. 2-3 months (at normal air humidity conditions for continious instrument operation).			•	•	•	•	•
IC-SPARE-ZERO115	ZERO AIR SYSTEM - REGULAR CAPACITY > Generates zero air (e.g. NOx & HONO free air) > For zero point measurement > With 2 filter cartridges: Activated coal + desiccant > Regular capacity with 115 ml in each cartridge > For external connection > Small size ideal for mobile applications	Can directly be attached on the side of the ICAD instruments with Polycarbonate IP64 housing instrument. Maintenance intervals of typ. 2 - 4 weeks (at normal air humidity conditions for continious instrument operation).			•	•	•	•	•
IC-SPARE-FILT	10X PTFE AEROSOL PORE FILTER (pure PTFE)	Aerosol pore filter (filter mat only, enclosure with connectors not included) with 5 µm pore size • >100µm thick pure PTFE layer • Used for particle filtering in ICAD inlet of high grade instruments (HONO/NO2 and L-Series) • Packages of 10 piece.			•	•	•	•	•
IC-SPARE-BASEFILT	10X PTFE on PET AEROSOL PORE FILTER 5µm PORE SIZE	Aerosol pore filter (filter mat only, enclosure with connectors not included) with 5 µm pore size • Thin PTFE filter membrane on PET supporting layer• Used for particle filtering in standard ICAD inlet • Packages of 10 piece.			•	•	•	•	•
IC-SPARE-PREFILT	10X PTFE AEROSOL DEPTH FILTER For prefiltering in strongly polluted environments.	Aerosol depth filter (filter mat only, enclosure with connectors not included) with 2 µm pore size. Less precise size cut-off, but high capacity • Ideal for prefiltering to enhance lifetime of the regular 5 µm filter • Used for particle filtering in ICAD inlet • Packages of 10 pieces.			•	•	•	•	•
IC-SPARE-FILTH	PTFE AEROSOL FILTER HOLDER > To hold aerosol filters > For 6mm tubes > with O-Ring sealing and knurled screw > Incl. 1x PTFE aerosol pore filter & 1x PTFE aerosol depth filter	Made from chemical inert PTFE material with O-Ring to guarantee proper sealing. Knurled screw to open filter holder without required tools. Used in ICAD inlet line.			•	•		•	•

Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
IC-SPARE-FILTHPFA	PFA AEROSOL FILTER HOLDER > To hold aerosol filters > For 1/4 inch tubes > Incl. adapter and tubes for 6mm > Incl. keys to open the filter holder > Incl. 1x PTFE aerosol pore filter & 1x PTFE aerosol depth filter	Made from chemical inert PFA material. Used in ICAD inlet line.					•		
IC-SPARE-PUMP-STD	MEMBRANE AIR PUMP - STANDARD > Compatible with any ICAD system > 12V, air flow < 5 l/min, up to 700mbar continuous pressure, power regulated with 0.5 to 12V signal > Prepared cable and connector > Pump rate regulated by ICAD > Lifetime > 10.000h	Lifetime is valid for maximum pump power • Longer lifetime for reduces pump power. In standard ICAD settings a lifetime of ~ 40.000h is expected.			•	•	•	•	•
IC-SPARE-PUMP	MEMBRANE AIR PUMP - FIXED PUMP POWER > Suitable for instruments without pump power regulation > 12V, air flow < 5 l/min, up to 700 mbar continuous pressure > Preset power reduction with resistor to ~21/min > Pump holder included > Lifetime ~40.000h	Suitable as replacements for older ICAD systems with only 12V power connection (no pump flow regulator). > Picture does not include the additional electronic.			•	•	•	•	•
IC-SPARE-O3LAMP	O3 GENERATOR LAMP OF NO CONVERTER > Replacement lamp (mercury) > Including holder and sealing for O3 generator > Lifetime ~20.000h	The O3 lamp generates O3 for the NO to NO2 converter needed in the NOx channel. PenRay lamp style. The lamp degrade over the lifetime and a replacement is required to ensure efficient NO to NOx conversion. The lamp is prepared and tested over ~10 days for efficient O3 production.					•	•	•
IC-UPGRADE-PRESSURE	PRESSURE SENSOR UPGRADE ICAD > Replacement pressure sensor > Coverage of absolute sample pressure from 300mbar to 1300mbar > Upgrade of Firmware > For two measurement channels	Extend measureable pressure range of ICAD, e.g. for air planes or high altitude measurement stations.		NOT APPLICABLE			•	•	•
IC-SPARE-SET-NO2	SPARE PART SET FOR ICAD NO2 1x power supply 12 V, 8 A with configured connector [ACC-PWR-8A] • 1x high capacity zero air filter cartridge [IC-SPARE-ZERO400] • 1x PTFE aerosol filter holder [IC-SPARE-FILTH] • Aerosol filter set 1x [IC-SPARE-PREFILT] & 1x [IC-SPARE-BASEFILT] (each 10 pieces) • Set of disposable aerosol filter (used on measurement cells) • 1x fan 80 mm [SPARE-FAN80V3] • 2x fan filter 80 mm, washable • 1x Membrane air pump with cable connector [IC-SPARE-PUMP-STD] • 1x Zero air particle filter inside ICAD (filter candle) • 2x NO2 Measurement LED	Set with all typical replacement components which degrade or break under normal operation after long operation time (> 2years) due to component lifetime. Include also parts of regular maintenance • Includes desiccant for Zero Air cartridges and aerosol filters.			•			•	•
IC-SPARE-SET-NOX	SPARE PART SET FOR ICAD NOX 1x power supply 12 V, 8 A with configured connector [ACC-PWR-8A] • 1x high capacity zero air filter cartridge [IC-SPARE-ZERO400] • 1x PTFE aerosol filter holder [IC-SPARE-FILTH] • Aerosol filter set 1x [IC-SPARE-PREFILT] & 1x [IC-SPARE-BASEFILT] (each 10 pieces) • Set of disposable aerosol filter (used on measurement cells) • 1x fan 80 mm [SPARE-FAN80V3] • 2x fan filter 80 mm, washable • 1x Membrane air pump with cable connector [IC-SPARE-PUMP-STD] • 1x Zero air particle filter inside ICAD (filter candle) • 1x O3 generator lamp of NO converter [IC-SPARE-O3LAMP] • 3x NOx Measurement LED	Set with all typical replacement components which degrade or break under normal operation after long operation time (> 2years) due to component lifetime. Include also parts of regular maintenance • Includes desiccant for Zero Air cartridges and aerosol filters.				•	•	•	•
IC-SPARE-SET-HONO	SPARE PART SET FOR ICAD HONO 1x power supply 12 V, 8 A with configured connector [ACC-PWR-8A] • 1x high capacity zero air filter cartridge [IC-SPARE-ZERO400] • 1x PTFE aerosol filter holder [IC-SPARE-FILTH] • Aerosol filter set 1x [IC-SPARE-PREFILT] & 1x [IC-SPARE-FILT] (each 10 pieces) • Set of disposable aerosol filter (used on measurement cells) • 1x fan 80 mm [SPARE-FAN80V3] • 2x fan filter 80 mm, washable • 1x Membrane air pump with cable connector [IC-SPARE-PUMP-STD] • 1x Zero air particle filter inside ICAD (filter candle) • 2x HONO Measurement LED	Set with all typical replacement components which degrade or break under normal operation after long operation time (> 2years) due to component lifetime. Include also parts of regular maintenance • Includes desiccant for Zero Air cartridges and aerosol filters.			•			•	
IC-MAINT-SET	ICAD BASIC MAINTENANCE SET 1x silica desiccant 0.9 kg [SPARE-SILICA] • Aerosol filter 10 X PTFE AEROSOL DEPTH FILTER (for prefiltering in strongly polluted environments) & 10 X PTFE on PET AEROSOL PORE FILTER 5µm PORE SIZE	Parts for regular maintenance • Includes desiccant for Zero Air cartridges and aerosol filters.			•	•	•	•	•
IC-SPARE-MCU-V2.2	ICAD MCU (MASTER CONTROL UNIT) BOARD V2.2 > Replacement with instrument specific firmware	Spare main instrument control board with temperature stabilisation controller and instrument firmware for your specific ICAD instrument. This board is only as replacement in Airyx instruments. The new v2.2 is compatible with most older versions. Please contact Airyx to clear compatibility.			•	•	•	•	•

Product overview of Airyx GmbH



Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
SPARE-PELTIER-V2	PELTIER COOLER AIRYX	Peltier cooler in Airyx instruments with cooling function. Peltier regulate the heating / cooling of the instrument between the heat sinks. Silicon sealed version			•	•	•	•	•
SPARE-FAN80V3	HEAT EXCHANGER FAN - 80 MM Long life and high power	Fan fitting to Airyx temperature stabilisation heat exchangers.			•	•	•	•	•
SPARE-FANFILT80	FAN FILTER - 80 MM - WASHABLE	Fan filter fitting to Airyx temperature stabilisation heat exchangers.			•	•	•	•	•
SPARE-SILICA	SILICA DESICCANT - 0.9 KG (1l)	0.9 kg silica desiccant with colour indicator (orange -> greenish) to be used in Airyx instruments and zero air systems (ICAD instruments).			•	•	•	•	•
SPARE-COAL	ACTIVATED COAL - 0.7 KG	0.9 kg activated carbon to be used in zero air systems (ICAD instruments).			•	•	•	•	•

					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	High Grad	Outdoor
SERVICES									
IC-SERV-EXT	POST WARRANTY MAINTENANCE SERVICE EXTENSION - ICAD Optional extension package • Starts after expiring of warranty • Price per year and ICAD system • Consumption parts like filters, pumps and lamps not included.	This is analogue to a longer warranty for this instrument. This does not include shipping costs if required. Required to be ordered with a new instrument.			•	•	•	•	•
SERV-NONLIN	SPECTROMETER NON-LINEARITY CHARACTERISATION Spectrometer non-linearity • Quantification and analysis • Protocol (per spectrometer)	Included when buying an Airyx instrument			•	•	•	•	•
IC-SERV-NO2-STD	ICAD NO2 SERVICE PACKAGE STANDARD Recommended after one year for NO2 instruments Replacements: Sample filter • Desiccant of zero air filter Services: Check of all system parameters • Light path calibration (NO2 mode) • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.			•			•	•
IC-SERV-NO2-EXT	ICAD NO2 SERVICE PACKAGE EXTENDED Recommended every two years for NO2 instruments Replacements: Sample filter • Desiccant and activated coal of zero air filter • Pump replacement • Zero air particle filter inside ICAD • Filter on the measurement cell (if replacement required) Services: Instrument check of all system parameters • Cleaning of optical measurement cell and high reflective mirrors (if required) • Light path calibration (NO2 mode) • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.			•			•	•
IC-SERV-NOX-STD	ICAD NOX SERVICE PACKAGE STANDARD Recommended after one year for NOx instruments Replacements: PTFE Aerosol Filter • Desiccant of zero air filter system Services: Check of all system parameters • Light path calibration (NO2 mode) • Calibration of NO to NO2 converter (with NO calibration gas) • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.				•	•	•	•
IC-SERV-NOX-EXT	ICAD NOX SERVICE PACKAGE EXTENDED Recommended every two years for NOx instruments Replacements: PTFE Aerosol Filter • Desiccant and activated coal of zero air filter system • Membrane air pump • O3 generator lamp of NO converter • Zero air filter inside ICAD • Filter on the measurement cell (if replacement required) Services: Check of all system parameters • Cleaning of optical measurement cell and high reflective mirrors (if required) • Light path calibration (NO2 mode) • Calibration of NO to NO2 converter (with NO calibration gas) • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.				•	•	•	•
IC-SERV-HONO-STD	ICAD HONO SERVICE PACKAGE STANDARD Recommended after one year for HONO instruments Replacements: Sample filter • Desiccant of zero air filter Services: Check of all system parameters • Light path calibration • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.			•			•	
IC-SERV-HONO-EXT	ICAD HONO SERVICE PACKAGE EXTENDED Recommended every two years for HONO instruments Replacements: Sample filter • Desiccant and activated coal of zero air filter • Pump replacement • Zero air particle filter inside ICAD • Filter on the measurement cell (if replacement required) • Measurement UV LED's (if required) Services: Instrument check of all system parameters • Cleaning of optical measurement cell and high reflective mirrors (if required) • Light path calibration • Internal PC clean-up • Backup data on ICAD to USB stick • Update of security relevant software	Service package includes the check and maintenance of the instrument at the laboratories of Airyx company.			•			•	
IC-SERV-CO2-CAL	ICAD CO2 SENSOR SERVICE CALIBRATION Calibration of CO2 Sensor (zero point and span with calibration gas bottles) Upload new calibration to internal parameters	Calibration of the CO2 sensor at the laboratories of Airyx company.			•	•	•		
ACC-SERV-SPEC1	SPECTROMETER GRATING REPLACEMENT > Replacement Grating for Avantes Spectrometers > Installation • Adjustment • Calibration • Non Linearity measurement	for Avantes ULS Spectrometers Type of grating and wavelengthrange to be defined			•	•	•	•	•

						ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	HighGrad	Outdoor	
RENTAL / TRAINING / MEASUREMENT SERVICE										
	Airyx provide a large range of Measurement services, instrument rental and training. Please contact Airyx for more details.				•	•	•	•	•	
IC-RENT-NO2-150M-WEEK	WEEKLY RENTAL OF ICAD-NO2-150-M IN SITU NO2 MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Time resolution up to 1 s • Precision up to 0.5 ppb @ 30 s • Range: 0 - 3 ppm > Data communication: LAN • RS232 • Wi-Fi (with ACC-WIFIUSB) > with GPS module for geolocation and time synchronisation > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight -7 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748 923 • China 71201680057099.6	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NO2 [IC-RENT-NO2-SERV]	IMAGE COMING SOON!	•				•	
IC-RENT-NO2-1000DT-M-WEEK	WEEKLY RENTAL OF ICAD-NO2-1000DT-M TWO CHANNEL TWIN INLET IN SITU NO2 MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Two inlets to measure at two sampling lines in parallel with two measurement cells > Time resolution up to 1 s • Precision up to 0.5 ppb @ 30 s • Range: 0 - 3 ppm > Data communication: LAN • Wi-Fi (with ACC-WIFIUSB) > with GPS module for geolocation and time synchronisation > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight -8 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NO2 [IC-RENT-NO2-SERV]	IMAGE COMING SOON!		•			•	
IC-RENT-NOx-150D-M-WEEK	WEEKLY RENTAL OF ICAD-NOx-150D-M TWO CHANNEL IN SITU NOX MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Time resolution up to 1 s • Precision up to 0.5 ppb @ 30 s • Range: 0 - 5 ppm > Data communication: LAN • RS232 • Wi-Fi (with ACC-WIFIUSB) > with GPS module for geolocation and time synchronisation > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight -10 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV]	IMAGE COMING SOON!		•			•	
IC-RENT-NOx-150DE-M-WEEK	WEEKLY RENTAL OF ICAD-NOx-150D-M TWO CHANNEL IN SITU NOX MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Time resolution up to 1 s • Precision up to 0.5 ppb @ 30 s • Range: 0 - 5 ppm > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > Data communication: LAN • RS232 • Wi-Fi (with ACC-WIFIUSB) > with GPS module for geolocation and time synchronisation > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight -10 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: WEEKLY RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV-WEEK]	IMAGE COMING SOON!		•	•		•	

Product overview of Airyx GmbH



					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	High Grad	Outdoor
IC-RENT-NOx-210DE-M-WEEK	WEEKLY RENTAL OF ICAD-NOx-210DE-M TWO CHANNEL IN SITU NOX/CO2 MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision ~2 ppm, accuracy ~5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option: Cooling + heating to temperature stabilize measurement cell in warm (up to 35° C) and cold environments > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight ~10 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV]	IMAGE COMING SOON!					
IC-RENT-NOx-210DE-M-MONTH	MONTHLY RENTAL OF ICAD-NOx-210DE-M TWO CHANNEL IN SITU NOX/CO2 MONITOR, IP64 HOUSING > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision ~2 ppm, accuracy ~5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option: Cooling + heating to temperature stabilize measurement cell in warm (up to 35° C) and cold environments > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight ~10 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV]	IMAGE COMING SOON!					
IC-RENT-NOx-210DE-M-WEEK	WEEKLY RENTAL OF ICAD-NOx-210DE TWO CHANNEL IN SITU NOX/CO2 MONITOR, PLUME CHASING CONFIGURATION > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision ~2 ppm, accuracy ~5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option > 19" rack housing • Size 43.6 x 36.5 x 13.2 cm³ • Weight ~ 10 kg • Front side display • Suitable for mobile measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of months for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx/CO2 [IC-RENT-NOx-CO2-SERV]	IMAGE COMING SOON!					

ICAD (IC) Subtypes					
Item#	Description	Comments	Related articles	Image	<div>SingleDualEmissionHighGradOutdoor</div>
IC-RENT-NOx-210D-MONTH	<p>MONTHLY RENTAL OF ICAD-NOx-210D TWO CHANNEL IN SITU NOX MONITOR</p> <ul style="list-style-type: none">> Direct nitrogen dioxide (NO2) gas measurement with ICAD method, NO2 calibration gas not required> Nitrogen oxide (NOx) measurement with conversion of NO to NO2> Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm> with GPS module for geolocation and time synchronisation> Data communication: Wi-Fi • LAN • RS232> Including ICAD cooling option: Cooling + heating to temperature stabilize measurement cell in warm (up to 35 °C) and cold environments> Power connection: 12V DC, with provided external power supply> 19" rack housing • Size 43.6 x 36.5 x 13.2 cm³ • Weight - 10 kg • Front side display • Suitable for mobile measurements> Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module> Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6> Qty defines number of months for rental	<p>Rental of instrument for customer measurement or testing projects.</p> <p>Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.</p>	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV]	IMAGE COMING SOON!	
IC-RENT-NOx-210DE-MONTH	<p>MONTHLY RENTAL OF ICAD-NOx-210DE TWO CHANNEL IN SITU NOX/CO2 MONITOR, PLUME CHASING CONFIGURATION</p> <ul style="list-style-type: none">> Direct nitrogen dioxide (NO2) gas measurement with ICAD method> Nitrogen oxide (NOx) measurement with conversion of NO to NO2> Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision -2 ppm, accuracy -5 ppm with regular offset calibration, range 0 - 2.000 ppm> Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm> Including online vehicle emission analysis software with the "Plume Chasing"-principle> Direct classification of NOx LDV and HDV emission factors (EURO VI to IV)> with GPS module for geolocation and time synchronisation> Data communication: Wi-Fi • LAN • RS232> Including ICAD cooling option: Cooling + heating to temperature stabilize measurement cell in warm (up to 35 °C) and cold environments> 19" rack housing • Size 43.6 x 36.5 x 13.2 cm³ • Weight - 10 kg • Front side display • Suitable for mobile measurements> Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module> Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6> Qty defines number of months for rental	<p>Rental of instrument for customer measurement or testing projects.</p> <p>Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.</p>	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx/CO2 [IC-RENT-NOx-CO2-SERV]	IMAGE COMING SOON!	
IC-RENT-NOx-210DL-MONTH	<p>MONTHLY RENTAL OF ICAD-NOx-210DL TWO CHANNEL IN SITU NOX MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none">> Direct nitrogen dioxide (NO2) gas measurement with ICAD method> Nitrogen oxide (NOx) measurement with conversion of NO to NO2> Time resolution up to 1 s • Precision up to 0.12 ppb @1 s & up to 0.02 ppb @60 s • Range: 0 - 2000 ppb> Increased sensitivity resonator cell configuration> Active ICAD LED light source cooling with peltier for best LED temperature stability (better 0.1 °C)> Data communication: LAN • RS232 • Analogue Voltage/Current • WiFi (with ACC-WIFIUSB)> suitable for GPS geolocation and time synchronisation (with option IC-ACC-GPSEXT)> Power connection: 12V DC, with provided external power supply> 19" rack housing • Size 43.8 x 13.2 x 66.5 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements> Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 5 m PTFE tubing • 2 m LAN cable with IP68 connector • 220V power supply • WIFI Stick module> Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6> Qty defines number of months for rental	<p>Rental of instrument for customer measurement or testing projects.</p> <p>Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.</p>	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONTROL ICAD-NOx [IC-RENT-NOx-SERV]	IMAGE COMING SOON!	




					ICAD (IC) Subtypes					
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	HighGrac	Outdoor	
IC-RENT-NOx-150DE-M-PC-WEEK	WEEKLY RENTAL OF EMISSION PLUME CHASING SYSTEM WITH ICAD-NOx-150DE-M TWO CHANNEL IN SITU NOX/CO2 MONITOR, IP64 HOUSING & PLUME CHASING SETUP > Complete Plume Chasing setup for the vehicle including tubing, tablet, tablet mounting, power cables > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision -2 ppm, accuracy -5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option > Polycarbonate IP64 housing • Dust and weatherproof (incl. weatherproof connectors) • Size 30 x 40 x 13.2 cm³ • Weight -10 kg • Suitable for mobile outdoor measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (small size) • 2 m LAN cable IP67 • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONROL ICAD-NOx/CO2 [IC-RENT-NOx-CO2-SERV]	<div>IMAGE COMING SOON!</div>						
IC-RENT-NOx-210DE-PC-WEEK	WEEKLY RENTAL OF EMISSION PLUME CHASING SYSTEM WITH ICAD-NOx-210DE TWO CHANNEL IN SITU NOX/CO2 MONITOR, PLUME CHASING SETUP > Complete Plume Chasing setup for the vehicle including tubing, tablet, tablet mounting, power cables > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision -2 ppm, accuracy -5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option > 19" rack housing • Size 43.6 x 36.5 x 13.2 cm³ • Weight - 10 kg • Front side display • Suitable for mobile measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (large size) • 2 m LAN cable • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONROL ICAD-NOx/CO2 [IC-RENT-NOx-CO2-SERV]	<div>IMAGE COMING SOON!</div>						
IC-RENT-NOx-210DE-PC-MONTH	MONTHLY RENTAL OF EMISSION PLUME CHASING SYSTEM WITH ICAD-NOx-210DE TWO CHANNEL IN SITU NOX MONITOR > Complete Plume Chasing setup for the vehicle including tubing, sampling inlet system, tablet, tablet mounting, power cables > Including online vehicle emission analysis software with the "Plume Chasing"-principle > Direct classification of NOx LDV and HDV emission factors (EURO VI to IV) > Direct nitrogen dioxide (NO2) gas measurement with ICAD method > Nitrogen oxide (NOx) measurement with conversion of NO to NO2 > Integrated CO2 IR-Sensor (two wavelength measurements): Relative precision -2 ppm, accuracy -5 ppm with regular offset calibration, range 0 - 2.000 ppm > Time resolution up to 1 s • Precision up to 0.05 ppb @ 60 s • Range: 0 - 5 ppm > with GPS module for geolocation and time synchronisation > Data communication: Wi-Fi • LAN • RS232 > Including ICAD cooling option > 19" rack housing • Size 43.6 x 36.5 x 13.2 cm³ • Weight - 10 kg • Front side display • Suitable for mobile measurements > Rental includes: calibration before rental • new particle filter • spare particle filter • new zero air filter system (large size) • 2 m LAN cable • 220V power supply • WIFI Stick module > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of months for rental	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.	REQUIRED ARTICLES: RENTAL SERVICE PACKAGE FOR QUALITY CONROL ICAD-NOx/CO2 [IC-RENT-NOx-CO2-SERV]	<div>IMAGE COMING SOON!</div>						

Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
IC-RENT-HONO/NO2-210L-WEEK	<p>WEEKLY RENTAL OF ICAD-HONO/NO2-210L IN SITU HONO AND NO2 MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none"> > Direct nitrous acid (HONO) and nitrogen dioxide (NO₂) gas measurement with ICAD method > Time resolution up to 1 s > Precision HONO: 0.1 ppb @10 s • 0.01 ppb @1000 s • Range: 0 - 0.5 ppm > Precision NO₂: 0.2 ppb @10 s • 0.02 ppb @1000 s • Range: 0 - 2 ppm > Increased sensitivity resonator cell configuration > LED cooling included [IC-LED1-COOL]: Stable LED temperatures for optimal measurement precision at changing ambient temperatures, especially for warm temperatures (above 25° C). This is also beneficial for the overall measurement precision of the ICAD. > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > GPS for geolocation and time synchronisation (with IC-ACC-GPSEXT) > 19" rack housing • Size 43.6 x 61 x 14 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • Aerosol filter • 5 m PFA tubing • Filter Keys • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of weeks for rental 	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.			•			•	
IC-RENT-HONO/NO2-210L-MONTH	<p>MONTHLY RENTAL OF ICAD-HONO/NO2-210L IN SITU HONO AND NO2 MONITOR - HIGH GRADE VERSION</p> <ul style="list-style-type: none"> > Direct nitrous acid (HONO) and nitrogen dioxide (NO₂) gas measurement with ICAD method > Time resolution up to 1 s > Precision HONO: 0.1 ppb @10 s • 0.01 ppb @1000 s • Range: 0 - 0.5 ppm > Precision NO₂: 0.2 ppb @10 s • 0.02 ppb @1000 s • Range: 0 - 2 ppm > Increased sensitivity resonator cell configuration > LED cooling included [IC-LED1-COOL]: Stable LED temperatures for optimal measurement precision at changing ambient temperatures, especially for warm temperatures (above 25° C). This is also beneficial for the overall measurement precision of the ICAD. > Data communication: LAN • RS232 • Analogue Voltage/Current • Wi-Fi (with ACC-WIFIUSB) > GPS for geolocation and time synchronisation (with IC-ACC-GPSEXT) > 19" rack housing • Size 43.6 x 61 x 14 cm³ • Weight less than 12 kg • Front side display • Suitable for mobile measurements > Included: Large Zero air cartridge • Aerosol filter • 5 m PFA tubing • Filter Keys • 3 m LAN cable > Patents: EP3329251 • DE 10 2015 000 423 • US15/748,923 • China ZL201680057099.6 > Qty defines number of months for rental 	Rental of instrument for customer measurement or testing projects. Airyx provide 75% of rental fee reimbursement, if within 3 months after the rental the same or similar type of instrument is purchased.			•			•	
IC-RENT-SUP1-WEEK	<p>ONLINE SUPPORT FOR INSTALLATION, OPERATION, TRAINING AND INSTRUMENT SUPPORT PER WEEK:</p> <ul style="list-style-type: none"> > Installation Plume Chasing setup in vehicle from customer > Instruction to operate and maintain the instrument (incl. download data) > Training to read online emission factors > Training requirements for high emitter detections > Remote control via internet network 				•	•	•	•	•
IC-RENT-SUP1-MONTH	<p>ONLINE SUPPORT FOR INSTALLATION, OPERATION, TRAINING AND INSTRUMENT SUPPORT PER MONTH:</p> <ul style="list-style-type: none"> > Installation Plume Chasing setup in vehicle from customer > Instruction to operate and maintain the instrument (incl. download data) > Training to read online emission factors > Training requirements for high emitter detections > Remote control via internet network 				•	•	•	•	•
IC-RENT-SUP2-WEEK	<p>ONLINE SUPPORT FOR OPERATION AND INSTRUMENT SUPPORT PER WEEK:</p> <ul style="list-style-type: none"> > Operation and measurement support > Data download support and quality check > Remote instrument support > Remote control via internet network 				•	•	•	•	•
IC-RENT-SUP2-MONTH	<p>ONLINE SUPPORT FOR OPERATION AND INSTRUMENT SUPPORT PER MONTH:</p> <ul style="list-style-type: none"> > Operation and measurement support > Data download support and quality check > Remote instrument support > Remote control via internet network 								
ACC-RENT-BAT-50Ah-WEEK	<p>WEEKLY RENTAL OF AIRYX INSTRUMENT LIPO BATTERY 12 V/50.4 Ah IP67 - PELICASE</p> <ul style="list-style-type: none"> > Included: 5 A charger > Included 1.5 m power cable for Airyx instrument connection > 3.37 kg > Rugged Peli 1150 case (24 x 19 x 11 cm³) > Including extra shipping fees for batteries in EU 	Battery pack for instrument power supply in remote areas • IP67 • 3.37 kg • Allow ~15 h of ICAD operation • 3 IP67 power connectors			•	•	•	•	•

					ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image	Single	Dual	Emission	HighGrac	Outdoor
SHIPPING / PACKING CUSTOMS (REGULAR)									
SHIP-D-S1	SHIPPING TO GERMANY - SIZE 1, including shipping insurance	< 5 kg e.g. Spare Parts							
SHIP-D-S2	SHIPPING TO GERMANY - SIZE 2, including shipping insurance	5 kg - 20 kg e.g. ICAD, SKYSPEC-COMP, SKYSPEC-MINI, ICAD-XX-210L			•	•	•		•
SHIP-D-S3	SHIPPING TO GERMANY - SIZE 3, including shipping insurance	> 20 kg e.g. SkySpec-1D / 2D						•	
SHIP-EU-S1	SHIPPING TO EU COUNTRIES - SIZE 1, including shipping insurance	< 5 kg EU countries excl. Germany e.g. e.g. Spare Parts							
SHIP-EU-S2	SHIPPING TO EU COUNTRIES - SIZE 2, including shipping insurance	5 kg - 20 kg EU countries excl. Germany e.g. ICAD, SKYSPEC-COMP, SKYSPEC-MINI			•	•	•		•
SHIP-EU-S3	SHIPPING TO EU COUNTRIES - SIZE 3, including shipping insurance	> 20 kg EU countries excl. Germany e.g. SkySpec-1D / 2D, ICAD-XX-210L						•	
SHIP-W1-S1	SHIPPING TO WORLD 1 DISTANCE COUNTRIES - SIZE 1, including shipping insurance, export custom documents	< 5 kg incl. export customs, Europe excl. EU e.g. Spare Parts							
SHIP-W1-S2	SHIPPING TO WORLD 1 DISTANCE COUNTRIES - SIZE 2, including shipping insurance, export custom documents	5 kg - 20 kg incl. export customs, Europe excl. EU e.g. ICAD, SKYSPEC-COMP, SKYSPEC-MINI			•	•	•		•
SHIP-W1-S3	SHIPPING TO WORLD 1 DISTANCE COUNTRIES - SIZE 3, including shipping insurance, export custom documents	> 20 kg incl. export customs, Europe excl. EU e.g. SkySpec-1D / 2D; ICAD-XX-210L						•	
SHIP-W2-S1	SHIPPING TO WORLD 2 DISTANCE COUNTRIES - SIZE 1, including shipping insurance, export custom documents	< 5 kg incl. export customs, non-Europe countries e.g. Spare Parts							
SHIP-W2-S2	SHIPPING TO WORLD 2 DISTANCE COUNTRIES - SIZE 2, including shipping insurance, export custom documents	5 kg - 20 kg incl. export customs, non-Europe countries; e.g. ICAD, SKYSPEC-COMP, SKYSPEC-MINI			•	•	•		•
SHIP-W2-S3	SHIPPING TO WORLD 2 DISTANCE COUNTRIES - SIZE 3, including shipping insurance, export custom documents	> 20 kg incl. export customs, non-Europe countries; e.g. SkySpec-1D / 2D; ICAD-XX-210L						•	
SHIP-CA-SB	SHIPPING ALUMINIUM CASE - SIZE B > Size (outside) W/D/H cm: 66,8 × 42,8 × 28,5 > Fit for: ICAD -M version > Thickness aluminium: 1mm	fit for ICAD -M version without cooling system. With integrated shock absorbing material, boxes can be stacked;							•
SHIP-CA-SBT	SHIPPING ALUMINIUM TROLLEY CASE - SIZE B > Size (outside) W/D/H cm: 66,8 × 42,8 × 28,5 > Fit for: ICAD -M version > Thickness aluminium: 1mm > With removal trolley system	fit for ICAD -M version without cooling system. With integrated shock absorbing material, boxes can be stacked;							•

Product overview of Airyx GmbH



Item#	Description	Comments	Related articles	Image	ICAD (IC) Subtypes				
					Single	Dual	Emission	High Grad	Outdoor
SHIP-CA-SC	SHIPPING ALUMINIUM CASE - SIZE C > Size (outside) W/D/H cm: 80,0 × 60,0 × 30 > Fit for: ICAD (all models) > Thickness aluminium: 1mm	fit for ICAD especially for the High Grade - L & Emission version instruments, with integrated shock absorbing material, boxes can be stacked			•	•	•	•	•
SHIP-CA-SCT	SHIPPING ALUMINIUM TROLLEY CASE - SIZE C > Size (outside) W/D/H cm: 80,0 × 60,0 × 30 > Fit for: ICAD (all models) > Thickness aluminium: 1mm > With removal trolley system	fit for ICAD especially for the High Grade - L & Emission version instruments, with integrated shock absorbing material, boxes can be stacked			•	•	•	•	•
SHIP-CA-SD	SHIPPING ALUMINIUM CASE - SIZE D > Size (outside) W/D/H cm approx.: 80,0 × 60,0 × 40 > Fit for: SKYSPEC-1D / 2D > Thickness aluminium: 1mm	fit for SKYSPEC 1D / 2D instruments, with integrated shock absorbing material, boxes can be stacked			•	•	•	•	•
SHIP-CA-SDT	SHIPPING ALUMINIUM TROLLEY CASE - SIZE D > Size (outside) W/D/H cm approx.: 80,0 × 60,0 × 40 > Fit for: SKYSPEC-1D / 2D > Thickness aluminium: 1mm > With removal trolley system	fit for SKYSPEC 1D / 2D instruments, with integrated shock absorbing material, boxes can be stacked			•	•	•	•	•

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						ICAD (IC) Subtypes				
Item#	Description	Comments	Related articles	Image		Single	Dual	Emission	High Grad	Outdoor