

DATA SHEET



C2in1 performance C



C2in1 performance X

Technical Specification

available since	2025	
dimensions	151x162x47,5mm	
weight	492g / 589g incl. 2 batteries	
capacitive touchscreen	yes, 3.5" (suitable for gloves)	
buttons	hard keys	
BTLE interface	BTLE 5.0, 8 channels	
storage capacity	up to 2TB	
warm-up time	0 min (when no calibration needed)	
internal temperature sensors	6	
temperature	-10 to 35°C (MU), 5 to 35°C (DS)	
ambient pressure	540 to 1,100 mbar (MU), 700 to 1,100mbar (DS)	
operating altitude	≤5,000m (MU in battery mode), ≤3,000m (DS)	
relative humidity	≤95%	
O ₂ content	≤25Vol. %	
degree of protection	IP52	
protection class	II	
barometer	yes	
type	stationary	mobile
battery running time	-	unlimited
positioning system	-	GPS, Glonass, Beidou, Galileo (customisable); sampling rate: 1Hz
LRBT range	-	approx. 1000m

Future Specifications (device prepared for)

Wifi interface	yes
accelerometer	yes
gyroscope	yes
magnetometer	yes

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Measurement Specifications

measuring method	breath-by-breath
flow volume type	digital turbine
flow volume range (reusable/disposable)	0,07-20L/s / 0,07-14L/s
resolution disposable turbine	14mL
resolution reusable turbine	3.5mL
flow volume accuracy (reusable/disposable)	±2% or 50mL / ±3% or 50mL
flow sensor distal dead space	32mL
flow sensor overall dead space	46mL
ventilation range	<300L/min
O ₂ type	electro-chemical cell
O ₂ range	≤25Vol.%
O ₂ accuracy	±0.1Vol.%
O ₂ response time (t90)	120ms
CO ₂ type	infrared (NDIR)
CO ₂ range	≤13Vol.%
CO ₂ accuracy	±0.1Vol.%
CO ₂ response time (t90)	100ms
sampling rate	500Hz (Measurement), 250Hz (Values)

Calibration & Service

flow volume calibration	calibration free (reusable turbine: daily)
automatic gas calibration	yes, with docking station
duration of gas calibration	2 min
gas calibration interval	monthly
calibration equipment	gas, Gas-on-Demand valve, (3L syringe)
O ₂ sensor life span	12 months

Electrical Specifications

PC interface	BTLE 5.0	
power supply	100-240 VAC, 47-63Hz	
battery	-	up to 6 rechargeable Li-Ion, 3.7V, 3400mAh

Software

Name	MetaSoft® Performance
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Features

room air control (2nd CO ₂ sensor)	yes	
RFID	yes	
O ₂ sensor replacement	toolfree	
flow sensor cable connection	push-pull connectors	
dynamic flow control	improved synchronisation	
upgrade flexibility	yes (temporary, pay-per-use, permanent)	
hot swap battery replacement	-	yes
Click&Go	-	single-handed mounting of C21 Mobile Unit onto carrying harness
carrying system	-	yes (front & rear carrying system, all in one)