

DATA SHEET

CAL-EDGE-8

CALMS AIR INC.



CAL-EDGE-8

This device is a highly sophisticated and affordable portable measurement data logger for compressed air systems, designed for experts and auditors. The device connects directly to CALMS web application which provides real time access to data from any web browser for any end user and their service partner.

Key features and benefits:

- > Plug & Play device, easiest and cheapest solution used for remote monitoring and auditing, alarming and reporting, designed for compressed air systems;
- > New Wireless Mesh solution, used to connect even the most distant sensors to the device WITHOUT any cables.
- > Helps improve your energy efficiency and shows where to save on energy costs;
- > Ability to connect to almost any compressor and sensor;
- > Increases your environmental image;
- > Increases the reliability of your equipment;
- > Robust industrial design.

Specifications:

Description	CAL-EDGE-8	Remarks
Hardware	Quad core Cortex-A53 (ARM v7) 64-bit SoC @ 1.5GHz, 1GB DDR2 RAM	
Protocol	MODBUS RTU, MODBUS TCP/IP, OPC UA, Wireless mesh	Up to 20 sensor per one device.
Interfaces	1x 10/100 Mbps Ethernet adapter	
Analog Inputs 4-20mA	8	Passive or active connection with internal 24VDC, 12bit resolution, with standard (4pin) connectors
RS 485	Standard: 1x	2-wire RS485 (half duplex)
WEB management	Yes	
Min logging Interval	1 sec (configurable)	
Data Storage	eMMC 8 GB	
Cloud connection	Mobile 3G/4G / LAN	
Operating Range	-25°C to 60°C (-13 F – 140 F)	
Power supply	24VDC	Recommended: 50W. Depends on sensor usage
Cellular modem	LTE EG25-G Module	Depends on network coverage
Antenna interface	Standard SMA interface-antenna included	
Size	H 56 x W 125 x L 250 mm H 2.20 x W 4.92 x L 9.84 Inches	
Weight	865 g /1,91 lb	
Materials	Enclosure: Aluminum	
Mounting	DIN rail or wall mounting	
EMC	EN 61000-6-2 EN 61000-6-3	
Approvals	CE / UL / FCC Class A	

Product information and accessories:

Product:	Description
CAL-EDGE-8 	<p>CALMS EDGE 8 survey device LTE 4G with 8x AI, Modbus RTU & Modbus TCP/IP and new WIRELESS MESH</p> <p>Portable measurement device supporting the following protocols: Modbus RTU, Modbus TCP/IP, OPC UA (without sensors)</p> <p>3G/4G Modem SMA with external antenna (with SIM card provided EU/Global)</p> <p>W-MODBUS gateway.</p> <p>8x Analog Input with 4pin connector</p> <p>1x Ethernet port 10/100 Base-T (LAN)</p> <p>1x RS485 port</p> <p>Internal memory Emmc 8GB, optional µSD 256GB</p> <p>Ambient temperature range: -25°C to 60°C (-13 F – 140 F)</p> <p>Power supply 24VDC; 2,1 A; 50W;</p> <p>Approval UL / CE / FCC Class A</p> <p>USB-C for battery operation.</p>
CAL-KIT 	<p>CAL-AUDIT-KIT includes :</p> <p>CAL-EDGE-8 with LTE 4G modem, Ethernet, RS485 - Modbus RTU and TCP,</p> <p>8 x Analog Inputs 4-20mA</p> <p>with Explorer case CA, Free CALMS platform fee 1 year and accessories:</p> <p>CT Rogowski Amps 4x compressor(4x CT RS 500A / 20mA) + Pressure transmitter(1x SML-10)</p> <p>with connection cables + 5 x AI extension cables 10m + 3 x AI open end short cable with connector for 4-20mA (generic 4-20mA pasive/active sensor)</p>
CAL-SENSOR-WBOX	<p>CALMS WIRELESS SENSOR BOX for connecting distant sensors without cables. Is used only with CAL-EDGE-8 device.</p> <p>2x Analog Input with 4pin connector</p> <p>2x Digital Input (screw terminal)</p> <p>1x RS485 port (screw terminal)</p> <p>Ambient temperature range: -25°C to 60°C (-13 F – 140 F)</p> <p>Power supply 24VDC; 2,1 A; 50W;</p> <p>Approval UL / CE / FCC Class A</p> <p>USB-C for battery operation.</p>
Accessories	Description
CAL-ANTENNA-EXT	<p>Antenna extension cable</p> <p>Attenuation: 2.4 Ghz 0.55 dB per meter 5.7 Ghz 0.86 dB per meter</p> <p>Diameter: 4.80 mm,</p> <p>Cable length: approx. 10 m</p>
CAL-RS485-SHARER	<p>3port RS-485 Port Sharer</p> <p>Used to share MODBUS slave data with two MODBUS masters.</p>
CAL-AI	<p>Cable 4-wire with connectors for analog inputs, 10m, optional length</p>
CAL-SENSOR	<p>Cable 4-wire with connector on one side and open wires on the other side for custom sensor connection, lenght 0.5m</p>
SENSORS	<p>Measuring equipment is optional and available under Measurement</p>
CAL-EXP	<p>Exporer case CA - carrying case -water proof 30lt (7.7 gal), 474x415xx214 mm (18,7x16,3x8,5 in), prepared for CALMS CA-lite installation, 4,7kg (10,4lbs)</p>