

Dresser Micro Series Volume Converter

Model MC2-197 PTZ

European Version



The CE badged European version Micro Converter is based on the proven MC2 platform (over 120,000 sold worldwide), meeting all necessary EU Directives for use within EU member states, and in other countries where compliance to European standards are required.

This converter is compatible with all Dresser meters and meters from other manufacturers with a low frequency pulse output, such as a reed switch or Wiegand pulser.

With an extensive data logging capacity including an Audit Log for tracking user configuration changes, together with a nominal 5 year battery life, this device can provide years of maintenance free service.

The device is certified for use in Zone 0, the harshest of hazardous areas, with the distinct advantage of being able to exchange the battery pack without removing the device from the hazardous area.

Features

- CE badged. Full compliance to all relevant EU Directives
- Proven, robust, reliable and durable construction
- IP66 Enclosure
- 3 independent and fully configurable Data Logs for years of data recording
- Separate Audit Log maintains a record of configuration and calibration changes

- Logs are saved in .CSV format which allows manipulation and sharing of information via MS Excel®
- Non-volatile storage of recorded Logs and converter configuration. No loss of data, even after power loss
- Field replaceable Alkaline sealed battery pack for a nominal 5 year service interval
- Optional field replaceable Lithium battery pack for a nominal 15 year service interval
- No loss of function during battery pack exchange due to Super Capacitors continuing to provide power
- Certified for the harshest Zone 0 hazardous area environment
- Simple Micro Converter User Terminal (MCUT) software for ease of configuration, calibration and data downloads
- Gas constituent values can be supplied by our customers before final verification and metrological sealing of the device
- Gas constituent values can be updated via password without breaking the physical metrology seal. Volume total registers may not be changed without breaking a physical metrology seal. All changes are recorded in the Audit Log

Presser Transducer	
Type	Semiconductor Strain Gauge
Certified ranges	0.8 - 2 Bar Absolute 2 - 12 Bar Absolute 5 - 70 Bar Absolute
Location	At chassis, or on 3m cable
Thread size	1/8 NPTF (1/4 BSPT adapter supplied with cabled versions)
Temperature Probe	
Type	PT100 (Class A), 4 wire
Size	50 x 6mm, on 3m cable
Volume Signal Input	
Input connections	1
Signal	Low Frequency (LF) < 2Hz at meter Qmax
Supported switch inputs	Open/Close contact Mechanical reed switch Solid state, current sinking, such as Dresser™ Wiegand sensor
Programmable pulse value	0.1, 1, 10 or 100m ³
Telemetry Pulse Output	
Output connections	3
Each configurable for	Vb (Corrected Volume) V (Uncorrected Volume) Alarm/Fault
Loop voltage	5 - 14.8VDC
Loop current	10mA maximum
Selectable pulse width	62.5, 125, 187 or 312ms
Switch "off" resistance	> 2 Mohms
Switch "on" resistance	< 10 ohms
Isolation	2,500 VDC
Display	
Type	LCD. 8 digit (10mm) + symbols
Capability	All selectable parameters
Pressure resolution	0.001 bar 0.01 bar for 70 barA model
Temperature resolution	0.1°C
Battery Service Life	
Continuous operation during battery pack exchange	
Sealed Alkaline Pack (Included)	
Typical life	> 5 Years
Low battery reserve	6 months (approximate)
Sealed Lithium Pack (Optional)	
Typical life	> 15 Years
Low battery reserve	18 months (approximate)
Data Logging	
Logging	3 independent data logs, selectable from 1 minute to 1 month
Parameters recorded	16 user selectable, Alarm & Fault, Date & Time stamp
Logging Capacity	Up to 32,161 logging records, FIFO
Audit log	Non-erasable
Communication	
Type	RS232, Serial cable
User PC Interface	Dresser™ Micro Corrector User Software (MCUT) 3.1.0.0
Email logging/alarm	Via third party I.S. GSM modem
GSM interrogation	Via third party I.S. GSM modem

Enclosure	
Material	Painted Aluminium
Ingress protection	IP66
Cable entry	Cable glands
Dimensions	160 x 118 x 62mm (W x H x D)
Weight	1.25Kg
Mounting	Wall, Pipe, Instrument Drive and Meter Bracket
Certified Environment	
Classes	M2 / E2
Operating Temperature	-25° to 55°C
Storage Temperature	-50° to 80°C
Humidity	0 to 95%, sustained outdoor exposure
Intrinsic Safety	Zone 0, 1 & 2 Ex ia IIC T4 Ga -40°C ≤ Tamb ≤ +60 °C
Accuracy	
Pressure error	< 0.4% Reading
Temperature error	< 0.5°C
Total Correction Error	< 0.5% (as per MID)
Selectable Gas Compression Methods (Z)	
AGA GCM1	AGA GCM2
SGERG Method 1	SGERG Method 2
SGERG Method 3	SGERG Method 4
NX19 Low CG	NX19 High CG
User definable fixed factor	
Product Conformity	
CE Marked	EU Directives and associated harmonised European Normatives thereof 2014/30/EU EMC 2014/32/EU MID 2014/34/EU ATEX
EU Type Examination Certificates	
2014/32/EU MID	NMi T10332
2014/34/EU ATEX	Baseefa17ATEX0086X
Manufacturing Quality Certification	
ISO 9001:2015	Lloyds Register 0078833
MID Module D	NMi CE-296
ATEX QA Notification	Baseefa ATEX 7120
MC2-197 PTZ Ordering	
Part Number	Description
061407-500	2 BarA FS PTx on 3m cable
061407-510	12 BarA FS PTx on 3m cable
061407-540	70 BarA FS PTx on 3m cable
061919-500	2 BarA FS PTx at chassis
061919-510	12 BarA FS PTx at chassis
061919-540	70 BarA FS PTx at chassis
Accessory Ordering	
Part Number	Description
061243-000	MCUT 3.1.0.0 software on USB
GS050/USB	Comms kit: MCUT on USB, 2m serial cable, USB adapter
AB009	Alkaline battery pack
AB013	Lithium battery pack
MZ141	Pipe kit. Inc. 6mm tube, fittings and test plug. (valve not included)
MZB33x	Thermowell, 1/2 BSPT for various pipe sizes, please call
103/EU+	Chatterbox-e+, Intrinsically safe pulse repeater / splitter

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