

# compact volume corrector PRIMUS400

Volume corrector with data logging memory. The device supports all functionalities and has all relevant approvals which a volume corrector of the compact class for smaller gas metering.



## **APPLICATION AND OPERATION**

#### Efficient through Experience, reliable in performance

Experience makes RMG one of the leading providers of natural gas measurement equipment. This is also shown with Primus 400 – a reliable solution for gas flow measurement and volume correction. With its competitive price and low overall operating cost the device is perfectly tailored to meet the demands of the natural gas industry: Trust in reliability and precision.

### Application

The Primus 400 volume corrector is a compact and robust device specifically developed for the natural gas market and for industrial usage. It allows gas network operators and their customers to measure precisely the gas flow, correct the measured volume based on the state variables pressure, temperature and compressibility as well as read out all data via standard protocols.

As a completely modular solution, the Primus 400 is a MID-approved volume corrector which can be used as a stand-alone system or mounted onto a gas meter. In addition, the Primus 400 allows remote reading via GSM / GPRS / LTE connection by a integrated modular modem. Parallel to the technical functionalities the volume corrector offers a very competitive price and a low operating cost.

#### Operation

The configuration data, archive entries, measured and calculated values as well as the messages in case of events can be read on the LCD display panel. The navigation in the data using the 6 button keyboard is menu-driven and is largely possible without the help of the manual. Parameter changes are also possible via the control buttons.

The operation is even easier and much more comfortable with the included readout, parameterization and visualization program RMGView<sup>Prime</sup>. The program can be used both locally and in the control center.

This intuitive Windows®-based software for data processing, graphical visualization, device settings and data export enables an easy commissioning and installation of the device.



## FEATURES AND TECHNICAL DATA

Technical Data			
Dimensions	263 x 201 x 111 mm		
Housing	Glass fiber polycarbonate		
Weight	2.2 kg		
Protection class	IP66		
Display	Graphic LCD display with backlight, 128 x 64 pixels		
Ambient temperature	-25°C to +70°C		
Temperature transducer	Resistance thermometer PT1000 (optional 3x) Cable length: 2.5 m standard (optional up to 100 m as the sum of all connected transducers)		
Measuring temperature	-25°C to +70°C		
Pressure transducer	ERMETO M12 x 1.5 (optional 3x) installed in the housing or externally with a cable length of 2.5 m (optionally up to 100 m as the sum of all connected transducers)		
Pressure ranges	0.8 - 5.2; 2 - 10; 4 - 20; 7 - 35; 14 - 70; 25 - 130 bar		
Software solutions	RMGView <sup>Prime</sup> for parameterization of Primus 400 WICO 22 for remote reading Drivers: GAS-X, Fröschl, Görlitz, Kisters Support of other software producers on request		
Supply options - CPU: - Modem:	Zone 0: Battery, 5 V Battery	Zone 1: Battery, 5 V Battery, 5 V	Zone 2: Battery, 5 V, 24 V, 230 V Battery, 5 V, 24 V, 230 V
Supply modules	Standard: module for basic device with lithium battery - up to 15 years lifetime With built-in modem with additional battery module (not with 24 / 230 V supply) External supply (optional): Zone 2: 230 V or 24 V (module integrated) Zone 0 & 1: 12 V (with external PS-E module, In: 12 V, Out: 5 V)		
Inputs	8 digital inputs: - 2x HF / encoder - 6x LF / binary Up to 6 analog inputs (optional)		
Outputs	Up to 4 digital outputs (LF or binary) Up to 4 analog outputs (optional)		
Encoder	Namur SCR+		
Interfaces	1 optical interface: 9.6 - 38.4 KBit/s 2x RS-232 / RS-485: 9.6 - 57.6 KBit/s Internal Modem		
Modem	GSM/GPRS LTE Cat1		
Compressibility methods	AGA NX-19 mod, AGA8-G1, AGA8-G2, SGERG-88, AGA8-92DC or as fixed value		
Metrological approvals	MID approval as volume corrector (pTZ) and as temperature corrector compliant to EN 12405-1 PTB approval maximum load indicator and load register		
ATEX approval	Ready for use in Zone 0, 1 and 2		



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#### **For More Information**

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