

# VARIOMOD Meter-Modems

- ✓ Transparent data readout, suitable for all common control centres
- ✓ Password protection (readout and/or remote configuration)
- ✓ Interfaces: RS485, RS232 or CL (switchable online)
- ✓ Long-range power supply
- ✓ 3 point mounting acc. to DIN 43861-2



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 VARIOMOD-DAB-E-2.00

		VARIOMOD <sup>gprs</sup>	VARIOMOD <sup>gsm</sup>	VARIOMOD <sup>ethernet</sup>	VARIOMOD <sup>analog</sup>
<b>Supply</b>	voltage current frequency power consumption	100...240 V AC (± 10%), 135 V...240 V DC (± 10%) max. 0,25 A 50...60 Hz max. 5 VA (CL1 active, load = 1000 Ω), UB = 240 V AC, at least 0,9 VA (RS232 active), UB = 100 V AC		100...240 V AC (± 10%), 135 V...240 V DC (± 10%) max. 0,25 A 50...60 Hz max. 5 VA (CL1 active, load = 1000 Ω), UB = 240 V AC, at least 0,9 VA (RS232 active), UB = 100 V AC	
<b>Real Time Clock (option)</b>	accuracy synchronisation running reserve capacitor	within ± 5 ppm via electrical data interface approx. 5 days		within ± 5 ppm via electrical data interface approx. 5 days	
<b>Control input</b>	system voltage	control of the call acceptance or alarm-/ message input for sending an SMS and E-mail	control of the call acceptance or alarm-/ message input for sending an SMS	alarm-/message input for sending an E-mail	control of the call acceptance or alarm-/ message input for sending an SMS
<b>Displays</b>	5 LEDs	Power, Signal, Connect, Online and Error		Power, Signal, Connect, Online and Error	
<b>Data interfaces</b>	electrical data interface data protocols transmission rates	RS485, RS232 and CL1 (switchable online), option: 2 x RS485 and CL1 (switchable online) IEC 62056-21 (7E1), DLMS (8N1), Mode C, Mode E, transparent 300 up to 19200 baud		RS485, RS232 and CL1 (switchable online), option: 2 x RS485 and CL1 (switchable online) IEC 62056-21 (7E1), DLMS (8N1), Mode C, Mode E, transparent 300 up to 19200 baud	
<b>Safety / EMC</b>	safety noise immunity radio disturbance	EN 60950-1 (2001) EN 55024 (1998) + A1 (2001) + A2 (2003) EN 55022 (1998) + A1 (2000) + A2 (2003)		EN 60950-1 (2001) EN 55024 (1998) + A1 (2001) + A2 (2003) EN 55022 (1998) + A1 (2000) + A2 (2003)	
<b>Temperature range</b>	specified operating range limit range for storage and transport	-10°C...+55°C  -25°C...+70°C		-25°C...+55°C  -40°C...+80°C	
<b>Relative humidity</b>		0...95%, non-condensing		0...95%, non-condensing	
<b>Housing</b>	dimensions mounting degree of protection: housing	105 x 175 x 74 (W x H x D) mm 3 point mounting acc. to DIN 43861-2 or wall mounting IP 54		105 x 175 x 74 (W x H x D) mm 3 point mounting acc. to DIN 43861-2 or wall mounting IP 54	
<b>Weight</b>		approx. 420 g	approx. 420 g	approx. 420 g	approx. 400 g
<b>Terminals</b>	spring terminals antenna connection	2,5 mm <sup>2</sup> single-wire or fine-wired; 1,5 mm <sup>2</sup> fine-wired incl. connector sleeve FME sleeve		2,5 mm <sup>2</sup> single-wire or fine-wired; 1,5 mm <sup>2</sup> fine-wired incl. connector sleeve ---	
<b>Functions</b>	call acceptance call acceptance delay password protection configuration + firmware update  operation safety	via time slots or control input 1...15 ring signal (configurable) 2 independent password levels, configuration and transparent mode via telephone network or locally via electrical data interfaces integrated watchdog, automatic reset (configurable)		--- --- 2 independent password levels, configuration and transparent mode via ethernet or locally via electrical data interfaces integrated watchdog, automatic reset (configurable)	
<b>Telephone connection</b>	connection protocols  compression error correction conformity dialing process	---	---	---	V.34, V.32bis, V.32, V.29FC, V.23, V.22bis, V.22, Bell212A V.21, Bell103 V.42bis, MNP5 V.42, MNP2-4 CTR21 / TBR21 multi-frequency tone dial
<b>GSM</b>	wavelength transmission performance connection protocols compression error correction	quad band 850 / 900 / 1800 / 1900 MHz max. 2 W with 850 / 900 MHz; max. 1 W with 1800 / 1900 MHz V.21, V.22, V.23, V.22bis, V.26ter, V.32, V.34, V.110 V.42bis MNP2		---	---
<b>GPRS</b>	class	class 10 up to 2 uplinks, up to 4 downlinks; maximum 5 links	---	---	---
<b>Network</b>	Ethernet  IP address allocation mode data transmission	---	---	IEEE 802.3 10BaseT/100BaseTx autonegotiation, Auto-MDI(X) DHCP or fixed IP-address TCP/IP Server, FTP, IPT, SMTP (Mail)	---
<b>Scope of delivery</b>	antenna  software documents connection cable (optional) telephone connection	magnetic fixing antenna with 2,5 m connection cable Variomod Manager operation- and installation guide ---	magnetic fixing antenna with 2,5 m connection cable Variomod Manager operation- and installation guide ---	---	Variomod Manager operation- and installation guide RJ45 network cable ---

The meter modem VARIOMOD is available as an GPRS-, GSM-, Ethernet- and Analog-modem. Due to the possibility of transparent data readout the modems are suitable for all common control centres. The modems are equipped with a RS485-, RS232- and CL-interface. Furthermore 1 alarm contact is available.

Meter-Modem VARIOMOD



The VARIOMOD functions can be extended with the following accessories:

External Station Aerial



Parameterisation software

