

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
- ✓ Wide push functions



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		VARIOMOD ^{GPRS}	VARIOMOD ^{ethernet}	VARIOMOD ^{analog}
Supply	voltage current frequency power consumption	100...240 V AC/135...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/135...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	max. 3,5 VA (CL1 active, load = 1000 Ω), UB = 240 V AC, at least 0,9 VA (RS232 active), UB = 100 V AC
Real Time Clock (option)	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	within ± 5 ppm via electrical data interface approx. 5 days
Control input	system voltage	control of the call acceptance, alarm-/message input for sending an SMS and E-mail, triggering of table reading	alarm-/message input for sending an E-mail	control of the call acceptance or alarm-/message input for sending an SMS
Displays	5 LEDs	Power, Signal, Connect, Online and Error	Power, Signal, Connect, Online and Error	Power, Signal, Connect, Online and Error
Data interfaces	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	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
Safety/EMC	safety noise immunity radio disturbance	EN 60950-1 EN 55024 EN 55022	EN 60950-1 EN 55024 EN 55022	EN 60950-1 EN 55024 EN 55022
Temperature range	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	-25°C...+55°C -40°C...+80°C
Relative humidity		max. 95 %, non-condensing	max. 95 %, non-condensing	max. 95 %, non-condensing
Housing	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	105 x 175 x 74 (W x H x D) mm 3 point mounting acc. to DIN 43861-2 or wall mounting IP 54
Weight		approx. 420 g	approx. 420 g	approx. 400 g
Terminals	spring terminals antenna connection	2,5 mm ² single-wire or fine-wired; 1,5 mm ² fine-wired incl. connector sleeve FME sleeve	2,5 mm ² single-wire or fine-wired; 1,5 mm ² fine-wired incl. connector sleeve ---	2,5 mm ² single-wire or fine-wired; 1,5 mm ² fine-wired incl. connector sleeve ---
Functions	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 GPS/GPRS 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)	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)
Telephone connection	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
GSM	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	--- --- --- --- ---	--- --- --- --- ---
GPRS	class	class 10 up to 2 uplinks, up to 4 downlinks; maximum 5 links	---	---
Network	Ethernet IP address allocation mode data transmission	--- --- TCP/IP Server, FTP, IPT, SMTP (Mail)	IEEE 802.3 10BaseT/100BaseTx autonegotiation, Auto-MDI(X) DHCP or fixed IP-address TCP/IP Server, FTP, IPT, SMTP (Mail)	--- --- ---
Scope of delivery	antenna software documents connection cable (optional) telephone connection	magnetic fixing antenna with 2,5 m connection cable Variomod Manager operation- and installation guide --- ---	--- Variomod Manager operation- and installation guide --- ---	--- Variomod Manager operation- and installation guide --- TAE-N plug, cable length 3 m (standard)

The meter modem VARIOMOD is available as an GPRS-, 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/signal input is available.

Meter-Modem VARIOMOD



The VARIOMOD functions can be extended with the following accessories:

External Station Aerial



Parameterisation software

