

# Technical Specification

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



## Meter-Modem VARIOMOD<sup>analog</sup> for analog-telephone network (PSTN)

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# Meter-Modem VARIOMOD<sup>analog</sup>

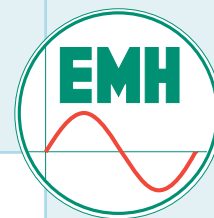
<b>Supply</b>	voltage current frequency power consumption	100...240 V AC ( $\pm 10\%$ ), 135 V...240 V DC ( $\pm 10\%$ ) max. 0.25 A 50...60 Hz max. 3.5 VA (CL1 active, load=1000 $\Omega$ ), UB=240 V AC, at least 0.9 VA (RS232 active), UB=100 V AC
<b>Real Time Clock (option)</b>	accuracy synchronisation running reserve capacitor	within $\pm 5$ 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 (Short Message Service)
<b>Displays</b>	5 LEDs	Power, Signal, Connect, Online and Error
<b>Data interfaces</b>	electrical data interface  data protocols transmission rates	CL1, RS485 and RS232 (switchable online), option: CL1 and 2 x RS485 (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)
<b>Temperature range</b>	operating storage and transport	-25°C...+55°C -40°C...+80°C
<b>Relative humidity</b>		0...95%, non-condensing
<b>Housing</b>	dimensions mounting degree of protection: housing weight	105 x 175 x 74 (W x H x D) mm 3 point mounting acc. to DIN 43861-2 or wall mounting IP 54 approx. 400 g
<b>Terminals</b>	spring terminals	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)
<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>Scope of delivery</b>	telephone connection software documents	TAE-N plug, cable length 3 m (standard) Variomod Manager installation instructions

Product specifications are subject to change without notice.



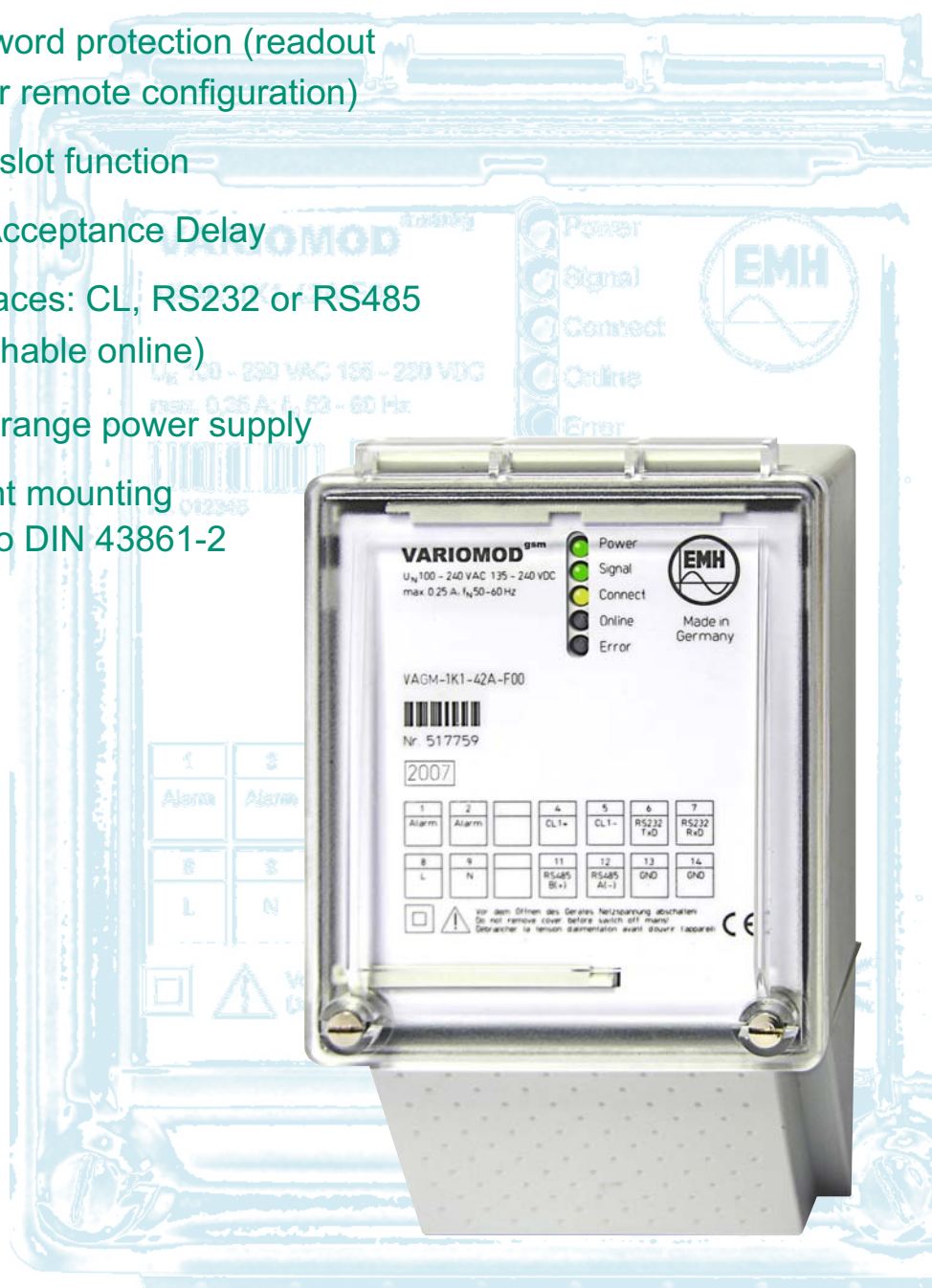
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- ✓ Long-range power supply
- ✓ 3 point mounting acc. to DIN 43861-2



## Meter-Modem **VARIOMOD**<sup>gsm</sup> for GSM-mobile radio network

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# Meter-Modem VARIOMOD<sup>gsm</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
<b>Real Time Clock (option)</b>	accuracy synchronisation running reserve capacitor	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 (Short Message Service)
<b>Displays</b>	5 LEDs	Power, Signal, Connect, Online and Error
<b>Data interfaces</b>	electrical data interface  data protocols transmission rates	CL1, RS485 and RS232 (switchable online), option: CL1 and 2 x RS485 (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)
<b>Temperature range</b>	operating storage and transport	-10°C...+55°C -25°C...+70°C
<b>Relative humidity</b>		0...95%, non-condensing
<b>Housing</b>	dimensions mounting degree of protection: housing weight	105 x 175 x 74 (W x H x D) mm 3 point mounting acc. to DIN 43861-2 or wall mounting IP 54 approx. 420 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
<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)
<b>GSM</b>	wavelength transmission performance  connection protocols compression error correction	quad band 850 / 900 MHz / 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>Scope of delivery</b>	antenna software documents	magnetic fixing antenna with 2.5 m connection cable Variomod Manager installation instructions

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