

## MULTIFUNCTION MULTIMETERS FLUSH MOUNTING DIN 96 x 96

### ENVIRONMENTAL WORKING CHARACTERISTICS

Working T: -5 ÷ +50°C  
Storage T: -15 ÷ +60°C  
Humidity: ≤90%

### STANDARDS/ REGULATION

Safety: 61010-1:2001  
EMC: EN61000-6-2 / EN61000-6-4  
CISPR22-EN55022

### ELECTRICAL COMPATIBILITY CE

Energy: EN61036:1996



EMM-4h  
EMM-4hp  
EMM-4h-485  
EMM-4hp-PF  
EMM-4h-485-A  
EMM-4hp-ETH

	EMM 4h	EMM 4hp	EMM 4hp-485	EMM 4hp-PF	EMM 4hp-485-A	EMM 4hp-ETH
<b>Mechanical characteristics</b>	Flush mounting DIN 96 x 96 mm   Depth 56 mm   Panel cut out 92x92 mm   Weight: 0,5 kg					
<b>Auxiliary supply</b>	110-230-400Vac   50-60Hz (directly from voltage inputs)					
OPTION C1	20÷60Vac/dc					
OPTION C2	90÷250Vac/dc					
<b>Protection degree</b>	Frontal IP 52   Box IP 20 (IP65 with external cover)					
<b>Voltage inputs</b>	3 inputs 500 V max (possible external VT ratio programmable 01÷400)					
OPTION 600	3 inputs 600 V max					
<b>Current inputs</b>	3 inputs 0,05÷5A rms with external CT ratio programmable 1÷ 2000					
OPTION 1A	3 inputs 0,01÷1A rms					
OPTION T	Isolated inputs with internal TA (for use in M.V.)					
OPTION TT	Direct inputs for Current max 10A					
OPTION N	4th input for measuring neutral current or residual current					
<b>Measured parameters</b>	V, I-n, A   cosfi, f, T, h   W, Var, VA   kWh, kVarh, KVAh					
<b>Measuring accuracy</b>	Voltage: < 0.5%   Current: < 0.5%   Powers: < 1%   Energies: < 1% series 2   CEI-EN61036					
<b>Frequency measure</b>	40 ÷ 100 Hz					
<b>Serial outputs</b>	-	-	1 Rs485 Communication protocol MODBUS-RTU Baud rate 9600-19200 bps	1 Rs485 Communication protocol PROFIBUS-DP Baud rate 9600-19200 bps	1 Rs485 Communication protocol MODBUS-RTU Baud rate 9600-19200 bps	-
OPTION S	-	-	-	Communication protocol PROFIBUS-DP Baud rate 2M bps MAX	-	-
OPTION LON	-	-	Communication protocol LON-WORKS	-	Communication protocol LON-WORKS	-
<b>Ethernet Output</b>	-	-	-	-	-	1 ethernet connectos RJ45 Communication protocol MODBUS-TCP FTP/HTTP/SMTP/SNMP
<b>Digital outputs</b>	-	2 photomos 10 ÷ 300Vcc / 150mA o 10÷250Vca / 150mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10 ÷ 300Vcc / 150mA o 10÷250Vca / 150mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10 ÷ 300Vcc / 150mA o 10÷250Vca / 150mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10 ÷ 300Vcc / 150mA o 10÷250Vca / 150mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10 ÷ 300Vcc / 150mA o 10÷250Vca / 150mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).
<b>Digital inputs</b>	-	1 optoisolated 90÷250 Vca/cc for changing band energy meters or status signalling	1 optoisolated 90÷250 Vca/cc for changing band energy meters or status signalling	1 optoisolated 90÷250 Vca/cc for changing band energy meters or status signalling	1 optoisolated 90÷250 Vca/cc for changing band energy meters or status signalling	1 optoisolated 90÷250 Vca/cc for changing band energy meters or status signalling
OPTION	-	-	-	-	-	-
<b>Analog outputs</b>	-	-	-	-	1 output 0÷20 / 4÷20 mA programmable 10 bit resolution	-
OPTION Z3A0	-	-	3 outputs 0-20 / 4-20 mA programmable16 bit definition(by external serial/analog converter) *	-	3 outputs 0-20 / 4-20 mA programmable16 bit definition(by external serial/analog converter) *	-
<b>Display</b>	4 displays with 10 mm red LED (3 digit of 10 mm - 7 segments)					

\* in this case serial output RS485 can not be used.