

MULTI-FUNCTION DIGITAL MULTIMETER
DIN RAIL 6 MODULES



EMM-D4h
EMM-D4hp
EMM-D4hp-485
EMM-D4hp-LON
EMM-D4hp-485-A
EMM-D4hp-ETH

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

EMM >>	D4h	D4hp	D4hp-485	D4hp-LON	D4hp-485-A	D4hp-ETH
Mechanical characteristics	DIN rail mounting 6 modules of 17,5 mm Weight 0,5 kg					
Auxiliary supply	110-230-400 Vac - 50-60 Hz					
Option C1	20÷60 Vac/cc					
Option C2	90÷250 Vac/cc					
Protection degree	IP 42 frontal - IP 20 box					
Voltage inputs	3 inputs 500V max (possible external VT ratio programmable) Voltage max 40kV					
Current inputs	3 inputs 0,05÷5A rms (with external CT ratio programmable) Current max 10000A					
Option 1A	3 inputs 0,01÷1A rms					
Option T	Isolated inputs with internal CT (for use in M.V.)					
Option TT10	direct inputs for current max 16A with closed miniaturized CT					
Option TT50	direct inputs for current max 63A with closed miniaturized CT					
Option TT100	direct inputs for current max 100A with closed miniaturized CT					
Option TTA50	direct inputs for current max 63A with openable miniaturized CT					
Option TTA100	direct inputs for current max 100A with openable miniaturized CT					
Option M	3 inputs 0,05 ÷ 5A rms for measure in 3 single-phase line and or bidirectional					
Option N	4th input for measuring neutral current or residual current					
Measured parameters	VI-I, VI-n, A - cosfi, f, °T, h - W, Var, VA - kWh, - kWh, + KVarh, - KVarh					
Measuring accuracy	Voltage: < 0.5% - Current: < 0.5% - Powers: < 1% - Energiess: < 1% class 1 - EN61036					
Frequency measure	40 ÷ 100 Hz					
Communication port	-	-	1Rs485 Communication protocol MODBUS-RTU baud rate 9600-19200 bps	Communication port LON-WORKS	1Rs485 Communication protocol MODBUS-RTU baud rate 9600-19200 bps	1 ethernet connector RJ45 Communication protocol MODBUS-TCP FTP / HTTP / SMTP / SNMP
Digital Outputs	-	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500msec.).
Digital inputs Option DI	-	1 optoisolated 90÷250Vca/ cc for changing band of energy meters or status signalling	1 optoisolated 90÷250Vca/ cc for changing band of energy meters or status signalling	1 optoisolated 90÷250Vca/ cc for changing band of energy meters or status signalling	1 optoisolated 90÷250Vca/ cc for changing band of energy meters or status signalling	1 optoisolated 90÷250Vca/ cc for changing band of energy meters or status signalling
Analog outputs	-	-	-	-	1 output 0÷20 / 4÷20mA programmable definition10 bit	-
Option Z3AO	-	-	3 outputs 0-20/4-20mA completely programmable - definition16 bit (by external serial/analog converter Z3AO)*	-	3 outputs 0-20/4-20mA completely programmable - definition16 bit (by external serial/analog converter Z3AO)*	-
Display	4 displays with 10 mm red LED (3 digit of 10 mm - 7 segments)					

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