inepro®

PRO1-S . PRO1-Mod . PRO1-Mod-Ba

Data sheet



5 YEAR WARRANTY

		PRO1-S (1100)	PRO1-Mod (1101)	PRO1-Mod-Ba (1102)
	Product family	PRO-line	PRO-line	PRO-line
Meter type & electrical system	Connection type	Direct	Direct	Direct
	Power system wiring	1P2W	1P2W	1P2W
	Phase direction	Top (L-in) >> down (L-out)	Top (L-in) >> down (L-out)	Top (L-in) >> down (L-out)
	Maximum current	45A	45A	45A
	Current range	0,15-5(45)A	0,15-5(45)A	0,15-5(45)A
	Operational current range	0,4% Ib-Imax	0,4% Ib-Imax	0,4% Ib-Imax
	Voltage range	120V~230V ±20%	120V~230V ±20%	120V~230V ±20%
	Frequency range	50/60Hz ±5%	50/60Hz ±5%	50/60Hz ±5%
	Power consumption	≤2W/10VA	≤2W/10VA	≤2W/10VA
Accuracy class	Active accuracy class	Class C (new MID)	Class C (new MID)	Class C (new MID)
	Reactive acccuracy class	Class B (not METAS)	Class B (not METAS)	Class B (not METAS)
	Voltage accuracy	±0.5%	±0.5%	±0.5%
	Current accuracy	±0.5%	±0.5%	±0.5%
	Frequency accuracy	±0.5%	±0.5%	±0.5%
	Reactive power accuracy	±1%	±1%	±1%
Measurement performance	MCU refresh speed	75ms	75ms	75ms
	Meter constant	1000imp/kWh	1000imp/kWh	1000imp/kWh
	LCD refresh time	500ms	500ms	500ms
Energy registers	Active energy	Yes	Yes	Yes
	Reverse active energy	Yes	Yes	Yes
	Reactive energy	Yes	Yes	Yes
Instantaneous measurements	Active power	Yes	Yes	Yes
	Reverse active power	Yes	Yes	Yes
	Reactive power	Yes	Yes	Yes
Energy calculation	Combination code (default)	Forward + reverse	Forward + reverse	Forward + reverse
	Combination code options	1-forward 2-reverse 3-forward+reverse 4-forward-reverse	1-forward 2-reverse 3-forward+reverse 4-forward-reverse	1-forward 2-reverse 3-forward+reverse 4-forward-reverse
Tariff functions	Number of tariffs	No	2	2/4
	Tariff switching	No	Yes	Yes
	Time-of-use tariff	No	No	Yes

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	Product family	PRO-line	PRO-line	PRO-line
Time function	Battery lifetime	n.a.	n.a.	10 years
	Real-time-clock (RTC)	No	No	Yes
	RTC accuracy	n.a.	n.a.	±0,5s/24H
	DI (Digital In tariff switch)	n.a.	1	1
Demand & event functions	Power-down counter	No	No	No
	Maximum demand	Yes	Yes	Yes
	Maximum demand calculation	Interval and slip, default interval	Interval and slip, default interval	Interval and slip, default interval
Communication	Modbus	No	Yes	Yes
	Modbus ID (default)	n.a.	001	001
	Modbus ID range	n.a.	001-247	001-247
	Modbus baudrate (default)	n.a.	9600	9600
	Modbus baudrate options	n.a.	9600 / 19200/ 38400/ 57600/ 115200	9600 / 19200/ 38400/ 57600/ 115200
	Modbus parity (default)	n.a.	EVEN	EVEN
	Modbus parity options	n.a.	EVEN/ NONE/ ODD	EVEN/ NONE/ ODD
	Maximum Modbus busload	n.a.	≤32	≤32
	Maximum Modbus cable range (m)	n.a.	≤1200	≤1200
	M-Bus	No	No	No
	M-Bus ID	n.a.	n.a.	n.a.
	S0 output	1XS0	No	No
User controls	Number of buttons	1	1	1
	Button type	Capacitive	Capacitive	Capacitive
	Number of LCD digits	6+2	6+2	6+2
	Default LCD cycle time	5s	5s	5s
	Backlight	Yes	Yes	Yes
	Backlight colour	White	White	White
Mechanical construction	Installation modules	1 DIN	1 DIN	1 DIN
	Width	18mm	18mm	18mm
	Case colour	Transparent + red	Transparent + red	Transparent + red
	Case material	PC	PC	PC
	Sealable protection cover	1 Seal	1 Seal	1 Seal
	Flame resistance class	UL94-V0	UL94-V0	UL94-V0

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	Product family	PRO-line	PRO-line	PRO-line
Phase terminals	Number of connectors	2	2	2
	Torque	1,5N·m	1,5N·m	1,5N·m
	Solid core wire	1mm² to 10mm²	1mm² to 10mm²	1mm² to 10mm²
	Soft core wire	1mm² to 10mm²	1mm² to 10mm²	1mm² to 10mm²
Neutral terminal	Number of connectors	2	2	2
	Torque	1,5N·m	1,5N·m	1,5N·m
	Solid core wire	1mm² to 10mm²	1mm² to 10mm²	1mm² to 10mm²
	Soft core wire	1mm² to 10mm²	1mm² to 10mm²	1mm² to 10mm²
Auxiliary terminal	Number of connectors	2	4	4
	Torque	0,4N·m	0,4N·m	0,4N·m
	Solid core wire	0.5mm² to 1,5mm²	0.5mm² to 1,5mm²	0.5mm² to 1,5mm²
	Soft core wire	0.5mm² to 1,5mm²	0.5mm² to 1,5mm²	0.5mm² to 1,5mm²
Electrical safety & protection	Over voltage category	OVC III	OVC III	OVC III
	Protective class	II	II	II
	AC voltage withstand (insulation capabilities)	4kV for 1 minute	4kV for 1 minute	4kV for 1 minute
	Impulse voltage withstands	6 kV (1.2/50 µs)	6 kV (1.2/50 µs)	6 kV (1.2/50 µs)
	Over current withstand	30 Imax (-10% ... +0%)	30 Imax (-10% ... +0%)	30 Imax (-10% ... +0%)
	Ride through time	150ms 230VL-N	150ms 230VL-N	150ms 230VL-N
	Magnetic field resistance	400MT	400MT	400MT
Operating conditions	Operating temperature range	-40~+70°C	-40~+70°C	-40~+70°C
	Reference temperature	25 ±2°C	25 ±2°C	25 ±2°C
	Operating humidity range	≤95% non-condensing	≤95% non-condensing	≤95% non-condensing
	Maximum operating altitude	≤2000m	≤2000m	≤2000m
	IP degree	IP51 (front side), IP20 (connection terminals)	IP51 (front side), IP20 (connection terminals)	IP51 (front side), IP20 (connection terminals)
Storage conditions	Storage temperature range	0~+40°C	0~+40°C	0~+40°C
	Storage humidity range	0~85%	0~85%	0~85%
Warranty	Technical lifetime	10 years at reference temperature	10 years at reference temperature	10 years at reference temperature
	Warranty terms	5 years	5 years	5 years

		PRO1-S (1100)	PRO1-Mod (1101)	PRO1-Mod-Ba (1102)
	Product family	PRO-line	PRO-line	PRO-line
Physical	Dimensions single packaging box (cm)	10.5x2.3x6.9(cm)	10.5x2.3x6.9(cm)	10.5x2.3x6.9(cm)
	Weight single packaging box (kg)	0.012(kg)	0.012(kg)	0.012(kg)
	Number of meters per carton box (pcs)	156	156	156
	Dimensions export carton box (cm)	33,5x31x30,5	33,5x31x30,5	33,5x31x30,5
	Weight full export carton box (kg)	15.4	15.6	15.9
	Number of carton box per Euro pallet (pcs)	24	24	24
	Number of meters per Euro pallet (pcs)	3744	3744	3744
	Dimensions Euro pallet size (cm)	120x80x139	120x80x139	120x80x139
	Weight full Euro pallet (kg)	391.3	396.1	403.3