

AM550

Modular Electricity meter



	4 Quadrant measurement
	 BS / DIN housing
	Multiple connection types
	Direct or current transformer connection
	Ingress protection
	Load profile
	Optical port
	Real-time clock
	Event logs
	  DLMS – COSEM compliance IDIS interoperability G3-PLC
	Multi-rate registration
	 Accuracy class
	Remote connection/disconnection
	Photovoltaic ready
	M-Bus communication
	Modular Communication
	Alarming

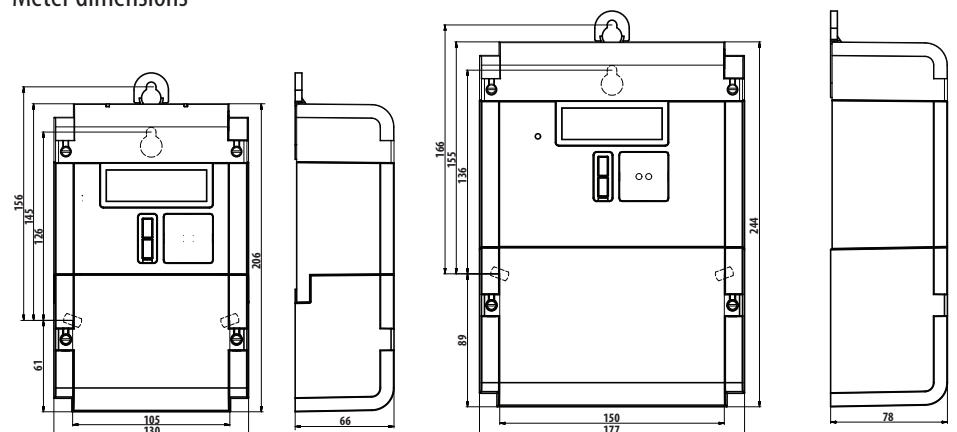



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Iskraemeco's next generation AM550 smart meter, with an innovative platform approach enables seamless integration of next generation smart metering functions into the smart grid. It is optimized for smart residential and mid-size commercial environments and assures maximum flexibility with:

- Universal standardized transparent pass-through communication interface
- Optimized new metrology base with a powerful "Measure Everything" measuring concept
- Modular communication on WAN (P3) and HAN (P1) level
- FW upgradeability of communication modules (P3 port)
- Backward compatible PLC modules
- Flexible memory capacity availability
- Extended set of embedded Smart Grid functions
- Integrated high level security mechanisms
- Flexible set of input/output options
- Sub-metering support and data forwarding over various HAN and WAN communication paths

Meter dimensions



		AM550-E	AM550-T
Type overview			
Network	Low voltage	●	●
Connection type	1P2W	●	
	3P4W		●
Communication	Optical port, RJ12 port (active or passive), M-Bus (wired or wireless), PLC (PLC G2/G3), Point-to-point (2G/3G/4G)		
Input – output options	Output 5 A/230 V relay, Output SSD - Solid State Relay 0.1 A / 230 V, Input (universal S0 input)		
Technical specifications			
Nominal voltage Un	110 V - 230 V		3 x 230/400 V, 3 x 110/190 V
Voltage range	0.8 – 1.15 Un		
Reference frequency	50 Hz or 60 Hz		
Current	Nominal current I_n	–	
	Base current I_b	5 A or 10 A	
	Maximal current I_{max}	DIN 1 Ph = 60 A and 85 A	BS 1 Ph = 100 A
Accuracy class	Active energy	Class 2 or Class 1 A or B (EN 50470 - 3, EN 50470 - 1)	
	Reactive energy	Class 3 or Class 2	
	Apparent energy	Calibrated up to 3%	
Real-time clock	Accuracy	< 5ppm or <±3 min/year	
	Back-up power supply	Super-Cap: < 7 days; life time 15 years, Exchangeable battery lithium - thionyl chloride : life time 10 years	
Switching device	Integrated		
Temperature ranges (IEC 62052 - 11)	Operation	-25 °C ... +55 °C; extended -40 °C ... +70 °C	
	Storage	-40 °C ... +80 °C	
Ingress protection IEC 60529	IP 54		
Liquid Crystal Display			
Basic functionality			
Measurement	Active energy and power, 4Q Reactive energy and power, Apparent energy and power, instantaneous value of voltage, current, power factor, frequency and power, Absolute measurement of active energy and power, Vector and Arithmetic measurement		
Tarif functions	Time-of-use (TOU) measurement of active energy and maximum demand (up to 8 tariffs, 12 season, 12 weekly programs, 16 switches, 105 special days)		
Load profiles	Two load profiles with different daily and hourly registration period with up to 32 different object, Four separate profiles for sub-metering (M-bus), Seven separate Event logs for different objects, Two billing profiles		
Power quality	Voltage sag, swell and cut, daily peak and minimum, voltage and current asymmetry, power failure, Power quality Load Profile		
Specific			
Backlit LCD display, Detection of opening meter, terminal and communication module cover, External magnetic field detector and magnetic immunity (sustainable up to 380 mT), Detection of meter wiring, In-house display support, Power quality supervision, Integrated switching device up to 3 x 100A (UC3), RTC (Super-Cap), Remote FW upgrade, Secured communication channels and authenticated and encrypted data exchange, DLMS Suite 0 and Suite 1 supported			
Optional			
Field exchangeable battery, M-Bus (integrated wireless or wired), Flexible I/O options, RS485, With/without breaker, Long/transparent terminal cover			



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