

FIELD EXCHANGEABLE MODULES

SOLVING ENERGY GRID CONNECTIVITY.



Communication is an essential element of the smart metering landscape, which is constantly evolving to allow utilities to quickly and effectively adapt to future changes in the grid infrastructure. Iskraemeco's field-exchangeable modules AC150, AC140 and CM-LTE -3 are a future-proof and flexible solution that utilizes multiple communication technologies.



FEATURES

- Modular design
- G3-PLC technology
- Cellular technologies
- Universal device interface
- WAN network
- HAN network
- NAN network
- Last gasp
- Hot swap

KEY BENEFITS

- **Simple installation and maintenance** - State-of-the-art design to ensure easy and cost-effective installation and maintenance.
- **Interchangeability** - The AC150 communication module uses a universal interface to seamlessly connect to a smart meter, gateway or concentrator.
- **Flexibility and upgradeability** - The AC150, AC140 and CM-LTE -3 support multiple communication technologies.
- **Reliable and high-performance communication** - The modules' robust design and proven communication technologies ensure device connectivity across the smart grid.
- **Future proof solution** - The AC150 offers a modular solution that is always up-to-date with the latest communication technologies.

MODULAR COMMUNICATION			
TECHNICAL SPECIFICATION			
Operational temperature range		-40°C to +70°C	
Storage temperature range		-40°C to +80°C	
Air humidity		max. 95%	
Power supply		No external power supply	
SPECIFIC			
AC150-Ax and CM-LTE-3	Supported technologies	GSM/2G (GPRS)	
		3G (UMTS)	
		AC150-Ax: 4G (LTE, LTE-M, NB-IoT), CM-LTE-3: 4G (LTE)	
	Antenna connection	AC150-Ax: Integrated antenna with possibility to connect external antenna via antenna coupler	
		CM-LTE-3: External antenna	
	Additional options	AC150-Ax: Last gasp support - up to 40 seconds of available time after power outage	
SIM card	All SIM card sizes and eSIM		
Diagnostics	Enhanced network and SIM card diagnostics using connection watchdog		
PLC			
AC150-Gx	Supported technologies	IEC 61334 (FSK modulation)	
		ITU-T G.9903 (G3 PLC)	
	Band/Frequency support	G3 PLC with CENELEC A and FCC frequency bands FSK with FM (Mark Frequency): 63300 Hz and SF (Space Frequency): 74000 Hz.	
P1 (CONSUMER PORT)			
AC140-Kx	Power supply options	P1 passive – without power supply for RJ11 connected device	
		P1 active – with embedded power supply for RJ11 connected device (1,25W)	
INTEROPERABILITY MATRIX			
Device	Supported Modules		
AM550	AC150-A5 (2G/4G) AC150-A6 (2G/3G/4G) AC150-A7 (2G/LTE-M/NB-IoT) AC150-G3 (G3 PLC) AC140-K1 (passive P1 port) AC140-K8 (active P1 port)		
IE.x	AC160-A6 (2G/3G/4G) AC160-A7(2G/LTE-M/NB-IoT)		
AC750	AC150-A6 (2G/3G/4G) AC150-G3 (G3 PLC) – integrated		
MT880	CM-LTE-3 (LTE)		