

GPRS/3G/4G Modem

EM-GPRS4G-AMx70



Residential



Commercial



Industrial

The AMx70 electricity meter series are modern, electronic, fully programmable devices, designed for application in AMI systems for monitoring and control of electricity consumption.

The AMx70 electricity meter series meets remote data transmission requirements and enables readouts of various measurands. The meters are compliant with IEC and DLMS/COSEM standards and have been designed to serve billing purposes.

The EM-GPRS4G-AMX70 is a data transmission modem that works over the cellular network over the LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage bands. It uses the TCP/IP protocol stack to send or receive the data.

The modem could be connected to the meter as a plug and play modem that could be connected through a direct connection slot of the meter cover.

The Modem module is located in an external module box that could be plugged or unplugged from the front of the meter with open the meter itself.

The module has an internal integrated antenna and enables an additional external antenna to be mounted outside the cabinet or meter case.

A Connector for SIM card is accessible to insert or replace the SIM card while the modem is unplugged from the meter.



MODEM SPECIFICATIONS

Modem Characteristics

Bands of cellular Communication	<u>LTE FDD</u> : B1/B3/B7/B8/B20/B28 <u>LTE TDD</u> : B38/B40/B41 <u>WCDMA</u> : B1/B5/B8 <u>GSM</u> : 900/1800MHz
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Communication Protocol	TCP/IP protocol stack
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Power Source	The modem is powered from the meter
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Environmental Conditions

Temperature Range	-5°C to +80°C
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Storage Temperature	-25°C to +80°C
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Humidity Range	<90%
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Altitude	0-3600M
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Service Life	20 Years
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Communication

Data Transmission Rate	RS-485: 2400 bit/s <u>LTE</u> : LTE FDD: Max 150Mbps (DL)/ Max 50Mbps (UL) LTE TDD: Max 130Mbps (DL)/ Max 30Mbps (UL) <u>UMTS</u> : HSPA+: Max 21Mbps (DL) HSUPA: Max 5.76Mbps (UL) WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL) <u>GSM</u> : EDGE: Max 236.8Kbps (DL)/Max 236.8Kbps (UL) GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL)
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