

RF Modem

EM-RF-AMx70



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-RF-AMX70 is a data transmission modem that works over radio frequency in the band 863-870MHz. It uses the PRIME protocol stack to send or receive the data.

The modem is connected to the meter as plug-in modem that could be connected in the field.

A built-in antenna is part of the modem that grantee a good working of the modem to connect with the nearby devices.

External antenna is also available with extended wire to be located outside the meter enclosure.

The Data Transmission Rate is 50 – 2400 Kbit/s.

It complies with the PRIME 1.4 specification.



MODEM SPECIFICATIONS

Modem Characteristics

Prime RF Communication

- radio frequency transmission over 1 channel
- band 863-870MHz
- FSK, OFDM, QPSK modulations

Communication Protocol

- DLMS over Prime protocol stack

Power Source

- The modem is powered from the meter connector

Environmental Conditions

Temperature Range -5°C to +80°C

Storage Temperature -25°C to +80°C

Humidity Range <90%

Altitude 0-3600M

Service Life 20 Years

Communication

Data Transmission Rate RF: 50 – 2400 Kbit/s

Transmission output Programmable TX output power up to 4.5dBm @ 900MHz

Max. Data Transmission Rate For MR-FSK, 400ksymbol/s
 For MR-OFDM, 2400 Kb/s
 For MR-O-QPSK, 1000 Kb/s
 For O-QPSK, 1000 Kb/s