

# RF Modem

## EM-RF-SmartG02



Residential



Commercial



Industrial

The SmartG-02 electricity meter series are modern, electronic, fully programmable devices, designed for application in AMI systems for monitoring and control of electricity consumption.

The SmartG-02 electricity meter series meet remote data transmission requirements and enable 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-SmartG02 is a data transmission modem that works over the sub-Giga radio frequency signal. It uses the 868MHz frequency band 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 the RS485.

The Modem module is located in an external module box.

The Data Transmission Rate is 20–100 Kbit/s.

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

### MODEM SPECIFICATIONS

#### Modem Characteristics

<b>Band of RF Communication</b>	868 Mhz – Sub Giga band
<b>Communication Protocol</b>	DLMS over HDLC protocol stack
<b>Power Source</b>	The modem is powered from the meter, or from external power source

#### Environmental Conditions

<b>Temperature Range</b>	-5°C to +70°C
<b>Storage Temperature</b>	-25°C to +80°C
<b>Humidity Range</b>	<90%
<b>Altitude</b>	0-3600M
<b>Service Life</b>	20 Years

#### Communication

<b>Serial Communication Port</b>	RS-485 Complies with DLMS/COSEM direct HDLC protocol
<b>Data Transmission Rate</b>	RS-485: 2400 bit/s RF: 20–100 Kbit/s



RF

