



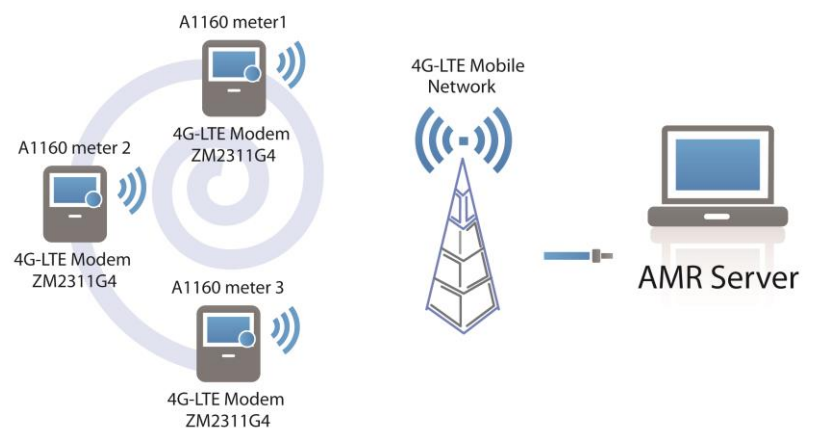
# ZM2311G4 LTE-4G/3G Modem

LTE-4G / UMTS-3G MODEM

## A MODEM FOR UNINTERRUPTED 2-WAY COMMUNICATION BETWEEN THE CENTRAL STATION & METERS ONSITE

ZM2311G4 is designed to embed in Honeywell A1160 energy meter. It is an industrial grade LTE-4G/UMTS-3G mobile data communication modem. This modem facilitates the polling and transfer of data from a cluster of meters on one hand and the execution of commands from the central site on the other — the processes of which are fully transparent to the meter protocol. The two-way communication is carried out via the LTE-4G data network or UMTS-3G data network.

A built-in temperature sensor inside the modem pre-empts potential issues resulting from extreme weather conditions; and the digital input detects abnormality in electric currents and voltage to ensure stable power supply.



## Key Features

- Compatible with Honeywell A1160 meter
- LTE-4G/UMTS-3G mobile data
- LED indicators for Mobile operation
- Fully transparent to meter protocol
- Support Mobile IP network Socket Server
- RS232 interface in RJ11 connector with pin assignment matching the A1160 socket
- Ambient temperature reporting
- 6VDC power supply from A1160

## Technical Data

### Data Interface to Meter

Standard	: RS232
Connector	: RJ11
Data Rate	: 2400bps–19200bps

### Mobile Data Communication

#### Frequency Bands

LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28  
 LTE TDD: B40  
 WCDMA: B1/B2/B5/B8  
 GSM: B2/B3/B5/B8

#### Data Rate

LTE	:	LTE-FDD	Max 10Mbps (DL)
			Max 5Mbps (UL)
		LTE-TDD	Max 8.96Mbps (DL)
			Max 3.1Mbps (UL)
DC-HSPA+	:		Max 42Mbps (DL)
			Max 5.76Mbps (UL)
UMTS	:		Max 384kbps (DL)
			Max 384kbps (UL)

### Transmit Power

Class 3 (23dBm±2dB) for LTE FDD  
 Class 3 (23dBm±2dB) for LTE TDD  
 Class 3 (24dBm+1/-3dB) for WCDMA  
 Class E2 (27dBm±3dB) for EDGE 850/900MHz  
 Class E2 (26dBm+3/-4dB) for EDGE 1800/1900MHz  
 Class 4 (33dBm±2dB) for GSM 850/900MHz  
 Class 1 (30dBm±2dB) for GSM 1800/1900MHz

## Receive Sensitivity

LTE B1: -101.5dBm (10M)  
 LTE B2: -101dBm (10M)  
 LTE B3: -101.5dBm (10M)  
 LTE B4: -101dBm (10M)  
 LTE B5: -101dBm (10M)  
 LTE B7: -99.5dBm (10M)  
 LTE B8: -101dBm (10M)  
 LTE B28: -102dBm (10M)  
 WCDMA B1: -110dBm  
 WCDMA B2: -110dBm  
 WCDMA B5: -110.5dBm  
 WCDMA B8: -110.5dBm  
 GSM: -109dBm  
 DCS: -109dBm

## Protocol

TCP/UDP/PPP/FTP/HTTP/NTP/PING/QMI

## USIM

1.8V/3V

## Status Indicator

LED1 : Power  
 LED2 : Modem Status  
 LED3 : Network Mode  
 LED4 : Network Status  
 LED5 : TXD (Data transmitting to meter)  
 LED6 : RXD (Data receiving from meter)

## Electrical

Power Supply : 5 - 6V DC

## Environmental(Temperature)

Operating : -20°C – +85°C  
 Storage : -40°C – +85°C

## Dimensions

L x W x H : 130.6mm x 54mm x 20.4mm (approx..)  
 (Embedded in A1160 Casings)

## 4G LTE/3G module Approvals

RoHS Compliant  
 CE/GCF/Vodafone (Europe)  
 RCM/Telstra (Australia)  
 NCC (Taiwan)  
 IC/Rogers (Canada)  
 Anatel (Brazil)  
 CCC/SRRC/NAL (China)