



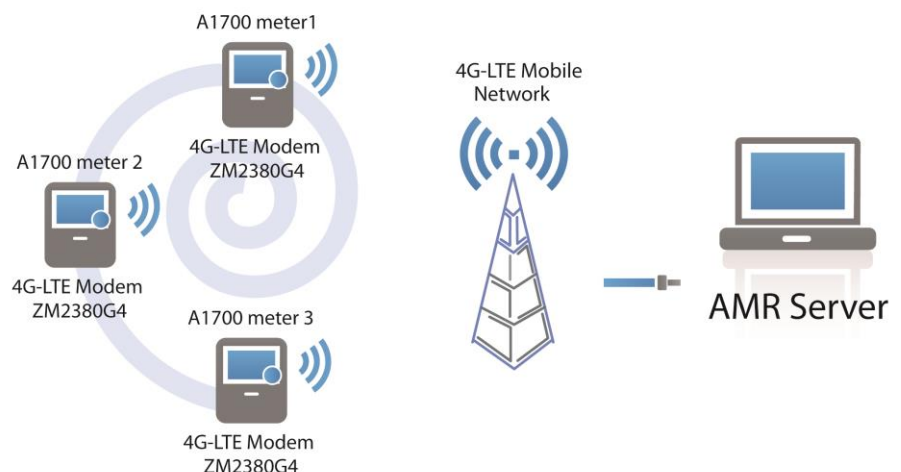
ZM2380G4 LTE-4G/3G Modem

LTE-4G / UMTS-3G MODEM

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

ZM2380G4 is designed to go into an Elster A1700 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 Elster A1700 electric meters
- 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 DB25 connector for meters connection
- Ambient temperature reporting
- 5VDC power supply from PS1700 Power Module



Technical Data

Mobile Data Communication

Frequency Bands

Selection from the following options:

- (1) LTE FDD: B1/B3/B5/B7/B8/B20
WCDMA: B1/B5/B8
GSM: B3/B8
- (2) LTE FDD: B2/B4/B12
WCDMA: B2/B4/B5
- (3) LTE FDD: B4/B13
- (4) LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28
LTE TDD: B40
WCDMA: B1/B2/B5/B8
GSM: B2/B3/B5/B8
- (5) LTE FDD: B1/B3/B5/B7/B28
WCDMA: B1/B5
- (6) LTE FDD: B1/B3/B5/B8/B28
WCDMA: B1/B5/B8
- (7) LTE FDD: B1/B3/B8/B18/B19/B26
- (8) LTE FDD: B1/B3/B5/B7/B8
- (9) LTE FDD: B1/B3/B5

Date 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 B12: -101dBm (10M)
 LTE B13: -100dBm (10M)
 LTE B20: -102.5dBm (10M)
 LTE B28: -102dBm (10M)
 WCDMA B1: -110dBm
 WCDMA B2: -110dBm
 WCDMA B4: -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

Data Interface to Meter

Standard : RS232
 Connector : DB25
 Data Rate : 2400bps–19200bps

Status Indicator

LED1 : Power
 LED2 : Network Status
 LED3 : RSSI
 LED4 : CSD/GPRS (For GSM modem Only)
 LED5 : RF Data (apply to ZM2380R only)
 LED6 : RF Status (apply to ZM2380R only)

Electrical

Power Supply : 5V DC

Environmental(Temperature)

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

Dimensions

L x W x H : 93mm x 64mm x 31mm

Compliance

RoHS and CE compliant
LTE-4G/3G module:
 CE/GCF/Vodafone (Europe)
 RCM/Telstra (Australia)