

AMC1700GEL

GSM/GPRS Wireless Modem for Elster A1700 3-Phase Meter



Features

- GSM and GPRS communications
- IEC 62056-21, transparent link
- Transmission speed;
 - 9600 baud for CSD connection over GSM
 - Up to 56kbps IP connection over GPRS
- Supports static and dynamic IP addresses
- LED support for easy installation procedure
- Electrical isolation from meter for external antenna
- Internal antenna with option for external antenna
- Over the Air Programming (OTAP) for future updates and enhancements
 - Supplied in Elster plastics for easy installation
 - Simple plug and play installation
- 12V Power Supply (Supplied from A1700 Meter)

Designed and manufactured in the UK

Communications

The AMC1700GEL is a quad-band smart modem communications interface that enables the Elster A1700 smart meter to access 2G cellular networks utilising GSM, GPRS and SMS text services. The AMC1700GEL can also support fixed IP (static IP address) communications when offered by the network provider. Communications across the GSM and GPRS channel is based on a transparent link utilising IEC 62056-21 protocol by the host.

Antenna

The AMC1700GEL modem is supplied as standard with an internal antenna and for areas of poor GSM network coverage, the modem can be configured to work with an external antenna.

LED Status Display

A simple LED status display system is implemented to provide installers with visual diagnostics.

Easy Configuration and Setup

The modems can be pre-programmed on the production line with users custom details such as APN, user name and password, etc. These settings can easily be changed by using AT commands over CSD dial up or by SMS text.

Product Overview

The Alpha Micro AMC1700GEL is a 2G GSM/GPRS communications modem that has been designed specifically for use with the Elster A1700 3-Phase remote disconnect Smart electricity meter.

The AMC1700GEL smart modem forms part of the AMI (Advanced Metering Infrastructure) that allows meter data to be passed back to the utility company at regular intervals or upon request.

The Alpha Micro AMC1700GEL can be used as a simple CSD modem (Circuit Switched Dialling), over GSM for dial up modem connections, and where supported by the network provider, a fixed IP connection for packet data transfer using GPRS is also available.

Using the AMC OTAP (Over the Air Programming) service the AMC1700GEL smart modem supports remote downloads of firmware updates so that the device can be maintained remotely.

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Over the Air Programming (OTAP)

Subscribing to the Alpha Micro OTAP service, the AMC1700GEL modem can support remote download of firmware updates allowing for future new enhancements to be remotely deployed.

Warranty

Alpha Micro smart modems carry a 12 month warranty from date of purchase which also includes access to the Alpha Micro OTAP service. Prices for extended warranties are available upon request.

Technical Data

Nominal Voltage	2-wire	12V DC
Antenna	GSM/GPRS Frequency Peak Gain VSWR Polarisation Azimuth beam-width	Internally mounted Antenna 880-960MHz, 1710-1990MHz +1 dBi Less than 2.5:1 Linear Omni-directional
External Antenna (Optional)	Connection by SMA connector	Reinforced isolation to 3.75KV
Interface AMC1700	Physical connection	25 Pin RS232 connector
User interface	Indication	3 LED's (Green, Amber, Red)
Temperature, conditions	Operating Storage Humidity	-10C to +70C -40C to +85C 0 to 95 rel humidity. non condensing
Power consumption	AMC1700GEL	<80mA @ 12V DC
Housing	Material	Polycarbonate, flame retardant, self extinguishing plastic, recyclable
Weight	AMC1700GEL Modem	<0.4kg (with internal antenna)

Ordering Information

Model Number	Description
AMC230GEL	GSM/GPRS wireless modem for Elster AS230 single-phase meter.
AMC1140GEL	GSM/GPRS wireless modem for Elster A1120/A1140 3-phase meter.
AMC1440GEL	GSM/GPRS wireless modem for Elster AS1440 3-phase meter.
AMC1700GEL	GSM/GPRS wireless modem for Elster A1700 3-phase meter.



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