



IQAN-G3 Multi-band Modem

Electronic Control Systems



ENGINEERING YOUR SUCCESS.

Application

The IQAN-G3 is a multiple band radio modem in the IQAN product group. The module is designed to transmit and receive information from devices that are connected to a CAN network, via a wireless link according to the GSM and UMTS standards. The unit also has the capability to receive GNSS (GPS) position data.

IQAN-G3 users will have access to remote diagnostic and telematics services for vehicle connectivity.

The modem is simple to setup from within IQANdesign software and provides easy remote access services using IQAN PC tools. Vendor tools are used for setting up Telematics services. You only need an internet connection to get access to the machine from the IQAN tools. The IQAN-G3 communicates with a master module by means of a CAN bus using IQAN Diagnostic Protocol.

The IQAN-G3 offers a seamless replacement of the IQAN-G2 modem.

Modem set-up

The IQAN-G3 functionality will be available with a SIM card from your preferred Network operator or use the embedded pre-installed SIM card. The solution also requires a paid subscription to a server solution that is offered by a Parker supplier. The OEM customer will have full web access to a machine portal for machine management, to add users, create groups and configure access. Contact your Parker representative or local Sales Company for additional information.

Installation

The unit is designed to be easily mounted in a vehicle dashboard or on an exterior panel. There are 5 LEDs provided for status signals. The unit has an aluminum housing and built-in, sealed connectors. The IQAN-G3 is constructed to be weatherproof for outdoor use.

The IQAN-G3 is made using selected components and conforms to strict international requirements.

Remote Diagnostics

The IQAN-G3 solution offers wide-area access to machines by wireless communication together with IQAN software tools. With an IQAN-G3 connected to the master module, it is easy to perform remote diagnostics on a machine out in the field. Trouble-shooting and updating of application software, real-time measurement and parameter adjustments can all be done from a remote location. This can shorten the diagnostics time and reduce travel costs for the initial diagnosis of a machine issue. If a repair is needed, the service technician will be better prepared with preliminary information and can bring all the necessary spare parts and tools needed to get the machine running quickly.

Telematics solution

Combine the IQAN-G3 module with a Parker supplier offering Telematics connectivity services. The vendor software tools allow you to setup telematics channels for data logging and storing measurement data on the server for future data analysis and evaluation. OEM customers can use a variety of services as Machine tracking, vehicle position and geo-fence functionality. Other examples are: vehicle data reporting and graphical overview of data.

General

Weight	0.54 Kg
Temperature range	
Operating, ambient ¹	-30 to +70 °C
Storage, ambient	-40 to +85 °C
Protection	outdoor use
Voltage supply	9 - 32 Vdc
Current consumption	< 150 mA @ V _{BAT} =24 Vdc
Sleepmode	< 1 mA

CE marking	2004/108/EC
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Performance

Mobile radio network

GSM/GPRS/Edge class 12 (850/ 900/1800/1900 MHz)
UMTS/HSPA 6-Band (800/850/900/1700/1900/2100 MHz)

GNSS

Accuracy	2.5 m horizontal (GPS/GLONASS)
Update rate	1 Hz
GNSS system	NAVSTAR GPS, GLONASS and BeiDou (Max. 2 systems in parallel)

Communication interfaces

CAN	1
Protocols	IQAN Diagnostic Protocol

Connector interfaces

Power/CAN	M12, 5 pin
GSM antenna	FME
GNSS antenna	SMA

Ordering part number

IQAN-G3	20085104
GNSS antenna	20085105
Cable (Power/CAN)	20077744

¹ The operating temperature for the manufacturer's SIM card may differ from the IQAN-G3 ratings. Consult the service provider to determine the temperature rating for the SIM card.

Environmental protection

EMI

EN 61000-4-3 (immunity vs EM field)
 EN 61000-4-4 (immunity vs supply transients)
 EN 61000-4-5 (immunity vs surge)
 EN 61000-4-6 (immunity vs disturbance)
 EN 61000-4-8 (immunity vs magnetic field)
 CISPR 16-2 (conducted emissions)
 CISPR 16-2 (radiated emissions)
 FCC Part 15/47 CFR Ch.1

Mechanical environment

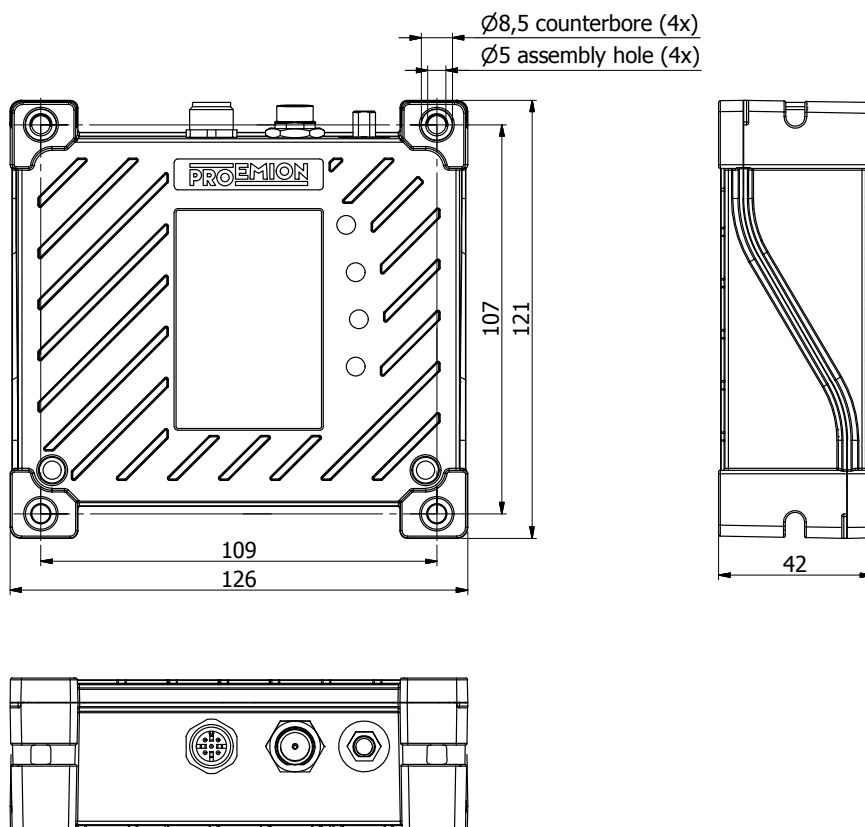
IEC 60068-2-6: 1993 Fc (vibration)
 IEC 60068-2-27: 1987 Ea (bump)

Climate environment

EN 60068-2-30: 1985 Db (var1, damp, cyclic)
 EN 60068-2-14: 1984 Na (temperature shock)
 EN 60068-2-14: 1984 Nb (temperature cycle)

ESD

EN61000-4-2 (handling)



units = mm



WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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