

SAR-Statement

The Smart SAM3W is a UMTS based modem. It provides EDGE, GSM, GPRS and WCDMA (R99 and R5 HSDPA) connectivity. This modem is based on the Qualcomm MDM6270 baseband processor, and designed for Machine-to-Machine applications. This modem does not have an integral antenna.

Depending on customers' requests, the Smart SAM3W modem may/may not be supplied with an antenna. In the case of customers wanting to acquire the antennas themselves, the antenna specification is included in the User Guide.

A typical application will require the Smart SAM3W to be connected to an external five-band 850/900/1800/1900/2100MHz antenna as described in the User Guide.

Based on the standards EN50385 and EN50383, a minimum safety operating distance has been calculated and stated in the User Guide.

Safety distance requirement:

The SMART SAM3W modem should NOT be operated when a person is within 203mm (8 inches) of the modem.

Approvals

- A-Tick
- CE-0168



Smart SAM3W GSM/GPRS/EDGE UMTS/ WCDMA/HSPA Modem

General Features

- QuadBand GSM/GPRS/EDGE 850/900/1800/1900MHz
- Dual-band UMTS (HSDPA) 850/2100MHz (900/2100)
- Standard 3GPP AT commands TS 27.007
- Support OpenAT™ platform
- Max Tx power:
 - 32dBm@850/900MHz
 - 29dBm@1800/1900MHz
 - 23dBm@2100MHz
- Input voltage : 5V to 30V
- Current consumption :
 - Standby : 22mA @ 12V
 - Average InUse (UMTS) : 180mA @ 12V
 - Average InUse (GSM/GPRS) : 145mA @ 12V
- Support 3V/1V8 U-SIM card
- Dimension : 79mm x 52mm x 24mm/19mm
- Weight: 60g (approx.)
- Operating temperature : -30C° to +75C°
- RoHS compliant

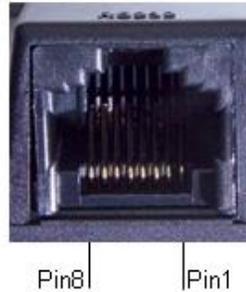
Data features

- GSM Circuit-switched data
- Quad-mode packet data UMTS/HSDPA/EDGE/GPRS
- EDGE/GPRS classB/10, support all coding schemes CS1 to CS4, MSC1 to MCS9
- UMTS upload/download 384Kbps
- HSDPA 3.6Mbps downlink, 1.8Mbps uplink
- SMS mobile Terminate/Originate
- Intercel's smart stack using Open-AT

The Serial RS232 Port (RJ45 socket) 300bps-230400kbps

Pin Signals Description

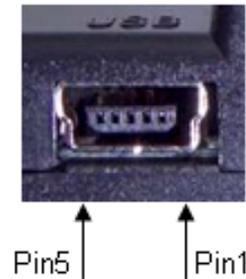
1 VIN	Input voltage 5Vdc - 32Vdc
2 DCD	Data Carrier Detect
3 DTR	
4 GND	Common Ground
5 RXD	Serial Data out of SMART SAM3W
6 TXD	Serial Data into SMART SAM3W
8 CTS	Clear to Send
7 RTS	Ready to Send



The USB 2.0 Port (USB MiniB socket)

Pin Signal

1 VIN
2 D-
3 D+
4 N/C
5 GND



Important Note : The RS232 and the USB ports can not be operated simultaneously, only one port at a time.

The Antenna Port

FME-Male 50Ω



SAFETY

The following safety precautions must be observed whenever the SMART SAM3W modem is in operation or in service. Failure to comply with these precautions violates the safety standards of the design, manufacture and intended use of the product.

- **Switch off the SMART SAM3W modem**
 - In hospitals or places where medical equipments used
 - In an aircraft
 - Refueling points
 - Explosive areas
- **Restricted use of the SMART SAM3W modem**
 - Near any chemical plant
 - Near any fuel depot
 - Areas with mobile phone warning sign
 - Respect national regulations on the use of cellular devices in vehicles. Road safety always comes first

The SMART SAM3W modem receives and transmit radio frequency energy while switched on, therefore interference can occur if the SMART SAM3W is near TVs, radios, PCs or any inadequately shielded equipments.



This symbol on the product indicates that this product shall not be treated as household waste . It must be placed at an appropriate collection point for the recycling of electrical and electronic equipments.

By ensuring the correct disposal of this equipment, it will help the environment and human's health. The recycling will help to conserve the natural resources.