

Wavecom



Intercel Smart SAM2W *2G Modem*

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Intercel Smart SAM2W

2G Modem

Overview

The Smart SAM2W is a GSM/GPRS modem, that sends/receives data over the GSM/GPRS network. This modem is designed for Machine-to-Machine applications. This modem does not have an integral antenna.

Depending on customers' requests, the Smart SAM2W modem can 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 SAM2W to be connected to an external dual-band 900/1800MHz 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.

Features

- ◇ Quad Band GSM/GPRS 900/1800/850/1900MHZ
- ◇ GPRS class 10
- ◇ GSM data, SMS and Fax
- ◇ Standard AT Commands
- ◇ Supporting Open-AT platform
- ◇ The Intercel smart stack loaded
- ◇ 1 serial RS232 port and/or 1 USB 2.0 (12Mb) port
- ◇ Auto on-line capability
- ◇ Max. power output:
2W @ 850/900MHZ
1W @ 1800/1900MHZ
- ◇ Input voltage : 5V to 32V
- ◇ Current consumption :
- ◇ Idle : 25mA @ 12V
- ◇ Average InUse : 140mA @ 12V

- ◇ Peak current 500mA @ 12V
- ◇ 1V8 and 3V SIM card
- ◇ Dimension : 79mm x 52mm x 24mm (19mm back)
- ◇ Storage temperature : -40C° to + 85C°
- ◇ Operating temperature : -30C° to + 65C°
- ◇ RoHS compliant

Data Features

- ◇ - GSM Circuit-switched data, asynchronous, transparent and non
- ◇ transparent modes
- ◇ - GPRS packet-switched data class 10, P channel supported, CS1 to CS4
- ◇ - Group 3 (class 2) fax
- ◇ - SMS mobile terminate/Originate and cell-broadcast



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Ports & Connections

The Smart SAM2W has 2 connectors, one RJ45 socket for the serial data port and the power supply, the other is the FME male antenna port.

The SAM2W includes a data cable to connect to a PC's serial port. The data cable is 2m long, and consists of an RJ45 plug, a DB9female connector and a 2-wire input power.

DB9/F	Signals	RJ45 Plug	Description
1	DCD	2	Data Carrier Detect
2	RXD	5	Serial Data out of the SAM2W
3	TXD	6	Serial Data into the SAM2W
4	DTR	3	Data Terminal Ready
5	GND	4	Common Ground
6	Unused		
7	RTS	8	Ready to Send
8	CTS	7	Clear to Send
9	Unused	1	RED WIRE: Input Voltage
		4	BLACK WIRE: Power Ground

Standards

- A-Tick
- EMC Test report : EMC Technologies
- GCF-CC Test report : 3GPP-CF
- Electrical Safety test report : Comtest Labs





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Specifications

GSM Modes	GSM Circuit-switched data, asynchronous, transparent and non transparent modes
SMS	Mobile terminate/Originate and cell-broadcast
Max. Output Power	2W @ 850/900MHz 1W @ 1800/1900MHz
SIM Voltage	1V8 and 3V SIM card
SIM Size	Full size
Max. Output Power	2W @ 850/900MHz 1W @ 1800/1900MHz
Standard AT Command	✓
Open AT	✓
Customised AT Commands	✓
GSM/GPRS	900/1800/850/1900MHz
GPRS Class	10, P channel supported, CS1 to CS4
Max. Output Power	2W @ 850/900MHz 1W @ 1800/1900MHz
Input Voltage	5V to 30V
Current Consumption	Idle : 25mA @ 12V Average In Use : 90mA @ 12V
Operating Temperature	-30C° to + 65C°
Storage Temperature	-40C° to + 85C°
Operating Humidity	5-95%
Dimensions	79mm x 52mm x 24mm (front)/19mm (back) - 73g
ROHS	✓
A Tick	✓
WEEE Compliant	✓



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Safety

The Smart SAM2W modem should NOT be operated when a person is within 203mm (8 inches) of the modem.

The following safety precautions must be observed whenever the Smart SAM2W 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 SAM2W modem:

- In hospitals or places where medical equipment used
- In an aircraft
- Refueling points
- Explosive areas

Restrict use of the Smart SAM2W 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 SAM2W modem receives and transmit radio frequency energy while switched on, therefore interference can occur if the Smart SAM2W is near TVs, radios, PCs or any inadequately shielded equipment.



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.

Ordering Information

◇ InterceI SAM2W 2G Modem

WCM-SAM2W

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