

M2M terminals

A quick reference guide

Inmarsat's machine-to-machine (M2M) services are accessible via small, lightweight, satellite terminals, which are quick to set up, easy to use and integrate seamlessly with bespoke applications.

A range of certified terminals are available for mobile and fixed use, providing remote management and performance options to suit different operational needs in the most extreme environmental conditions.

		BGAN M2M				IsatData Pro		
								
		Hughes 9502 (external antenna)	Hughes 9502 (integrated antenna)	Hughes 9450-C11 Mobile	Wideye Sabre™ RangerM2M	IDP 600 series	IsatData Pro 782	IDP 800 series
Technical specifications	Form factor	Separate terminal with external antenna	Single terminal with integrated antenna	Separate terminal with external mobile tracking antenna	Single terminal with integrated antenna	Terminal unit with integrated antenna	Satellite and 2G/3G hybrid terminal for use with external antenna	Low profile terminal for asset tracking
	Manufacturer	Hughes BGAN.hughes.com	Hughes BGAN.hughes.com	Hughes BGAN.Hughes.com	Addvalue Communications wideye.com.sg	SkyWave skywave.com	SkyWave skywave.com	SkyWave skywave.com
	Dimensions (W x H x D) and weight	Terminal 200 x 150 x 45mm, 1.5kg Antenna 385 x 385 x 33mm, 1.9kg	275 x 275 x 84mm 3.8kg	Terminal 281 x 234 x 46 2.3kg Antenna 252 x 119 2.0kg	305 x 186 x 49mm 1.5kg	IDP-680: 127 x 127 x 49mm 0.46kg IDP-690: 126 x 126 x 101mm 0.46kg	115 x 136 x 41mm Transceiver: 2.5kg/3.3kg (without battery/with battery)	432 x 147 x 25mm 1.3kg
	Interfaces	RJ45, Ethernet, GNSS and USB (for management only)	RJ45, Ethernet, GNSS and USB (for management only)	4 x (PoE) ports, Multi-user WiFi	RJ45, Ethernet	RS232, RS485, 4 x digital/analogue	2 x RS232, 1 x RS485 4 x digital/analogue inputs/outputs, 2 x dedicated outputs (sink-ground) 1-CAN bus, 1-Wire, Accelerometer: 3 Axis	1 - RS232, 3 digital/analogue, internal accelerometer
	Power requirements	12 or 24 VDC	12 or 24 VDC	12 or 24 VDC	12-18 VDC	9-32 VDC (load dump protected)	9 - 32VDC (load dump protected) and battery backup	9-32 VDC (load dump protected) or integrated battery
	Power consumption	Transmit: <20W Idle - regional beam: 1W Off: (wake on packet): <50mW	Transmit: <20W Idle - regional beam: 1W Off: (wake on packet): <50mW	Transmit <50 W Idle: 25 W Does not include power supplied to PoE devices	Transmit: <22W Idle - regional beam: 6W	Transmit: 750mA, GPS: 40mA Receive: 83mA, Sleep: 100µA	Transmit: 1A, Cellular: 153mA GPS: 32mA, Receive: 64mA, Cellular: 35mA, Sleep: 110µA	Transmit: 750mA, GPS: 40mA Receive: 83mA, Sleep: 100µA
	Power sources	Mains (with adapter), solar, battery	Mains (with adapter), solar, battery	Mains (with adapter), vehicle/vehicle battery	Mains (with adapter), solar, battery	Mains (with adapter), solar, battery	Mains (with adapter), solar, battery	Mains, battery (up to 3 years life depending on usage)
Operating temperature range	-40°C to +75°C	-40°C to +75°C	Modem -25° C to +55° C operating Antenna -25° C to +55° C operating -40° C to +80° C survival	-40°C to +75°C	-40°C to +85°C	Terminal and antenna: -40°C to +85°C; Back-up battery: -10°C to +60°C	-40°C to +85°C depending on battery option	

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Service specifications	Services	Standard IP, SMS, BGAN M2M certified	Standard IP, SMS, BGAN M2M certified	Standard IP, SMS, BGAN M2M certified	Standard IP, SMS, BGAN M2M certified	Store and forward messages; all messages acknowledged	Store and forward messages; all messages acknowledged	Store and forward messages; all messages acknowledged
	Usage	Fixed	Fixed	Semi-fixed or mobile	Fixed	Fixed and mobile	Fixed and mobile	Fixed and mobile
	Typical performance	Up to 448/464kbps* (send/receive)	Up to 448/464kbps* (send/receive)	Up to 448/464kbps* (send/receive)	Up to 384kbps (IP Rx)* Up to 240kbps (IP Tx)	Up to 6400 bytes send Up to 10000 bytes receive	Up to 6400 bytes send Up to 10000 bytes receive Cellular communications	Up to 6400 bytes send Up to 10000 bytes receive
	Latency	800 milliseconds round-trip	800 milliseconds round-trip	800 milliseconds round-trip	800 milliseconds round-trip	Event reports <15 seconds, files 45-60 seconds per kb	Event reports <15 seconds, files 45-60 seconds per kb	Event reports <15 seconds, files 45-60 seconds per kb
	Conformity	95% relative humidity IP 65 (antenna) IP 40 (modem) Class 1, Div. 2 certified (optional)	95% relative humidity IP 66 Class 1, Div. 2 certified (optional)	IP56 (antenna) Wind: 125 mph (200 km/h) - exception for Magnetic Mount: 100 mph (160 km/h) Ice: 25 mm non-operational IP 40 (modem)	95% relative humidity IP 65 Class 1, Div. 2 certified (inclusive)	95% relative humidity IP 67 Class 1, Div. 2 certified	IP 67 (antenna) IP 54 (modem)	90% relative humidity at 85°C IP 67
	Typical applications	Remote fixed asset monitoring for telemetry and surveillance, real-time monitoring and control, small and large data transfer	Remote fixed asset monitoring for telemetry and surveillance, real-time monitoring and control, small and large data transfer	Remote monitoring and management of high value assets such as heavy machinery within transportation and logistics, precision farming, forestry, construction, oil & gas, mining, civil government and utilities	Remote fixed asset monitoring for telemetry and surveillance, real-time monitoring and control, small and large data transfer	Asset tracking, fleet management, event notification, remote monitoring, text messaging	Asset tracking, fleet management, event notification, remote monitoring, text messaging	Asset tracking, fleet management, event notification, remote monitoring, text messaging
	Accessories	Basic fixed mount kit, IDU strap, 1.5 and 2" Az/El bracket, solar panels, AC/DC adapter	Basic fixed mount kit, 1.5 and 2" Az/El bracket, solar panels, AC/DC adapter	Magnetic feet for the antenna and the 12V Cig-plug power adapter	Fixed mount kit, RS232 debugging kit, AC/DC adapter, solar panels	On board scripting engine with a range of standard agents, bottom and side entry connectors	On board scripting engine with a range of standard agents.	On board scripting engine with a range of standard agents, rechargeable and non-rechargeable options

*Inmarsat's BGAN M2M is a subscription-based service with monthly packages starting at 2MB with billing increments of 1KB. For additional flexibility, pooled data plans are also available.

How to buy

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