

Satellite Data Transfer System BGAN Modem

Cost-effective, ultra-low power consumption all-IP BGAN (Broadband Global Area Network) satellite terminal



Description

- Auto-on/auto-context activation automatically restores power and PDP connection to itself following loss of power and/or IP connection
- Remote control via SMS
- Relay mode passes WAN IP address to the connected RTU
- Security enhancements with extended layers of embedded security options

Specifications

Characteristic	Description / Value
Satellite transmit frequency	1626.5 ... 1660.5 MHz
Satellite receive frequency	1525 ... 1559 MHz
GPS frequency	1574.42 ... 1576.42 MHz
SAT continuous TX time	Up to 3.25 hours at 128 kbps
SAT continuous RX time	Up to 5.5 hours at 128 kbps
SAT standby time	Up to 36 hours
Input voltage	+12 VDC / +24 VDC nominal
Power consumption	Transmit: < 20W Narrow beam w/o transmit: 3W Idle (regional beam): < 1W
Dimension and Weight	
Indoor unit	150 x 216 x 45 mm / 1.2 kg (2.64 lbs)
Outdoor unit	385 x 385 x 33 mm / 1.9 kg (4.18 lbs)
Operating temperature	-40 ... +75°C
Storage temperature	-55 ... +75°C

Characteristic	Description / Value
Humidity	95% RH @ +40°C
Wind loading (outdoor unit)	Survival wind loading (with optional mount) up to 100 mph
Protection	IP40 (indoor unit), IP65 (outdoor unit)
Interfaces	Ethernet connection (RJ45) USB–Type B for connection to configuration PC RS-232 (DB9) to external NMEA 0183-based GNSS device (e.g., GLONASS receiver) TNC connection on the IDU to the external antenna
Cable	10 meters RF antenna cable (included in delivery)
Manufacturer	Hughes Network Systems

Sensor connection diagram

Configuring Meteo-40 data loggers for BGAN communication

BGAN satellite modems are connected via Ethernet to Meteo-40. The BGAN modem itself is configured via the software provided by its manufacturer. Refer to the modem user manual for further details. e.g. network registration.

Select a LAN switch from the dropdown list in the Communication→LAN menu of the Meteo-40 web interface to supply the modem. Deselect the checkbox LAN online, whenever CECS is on to prevent excessive traffic.

Go to the Communication→Online menu and copy the Ammonit tunnel address of the data logger, e.g., <https://dnnnnnn.tunnel.ammonit.com>. Disconnect the data logger from your PC and / or LAN. After entering the copied address in your browser, you should be able to log into the Meteo-40 web interface via the satellite connection.

Refer to the Meteo-40 user manual for further details about the BGAN modem configuration.