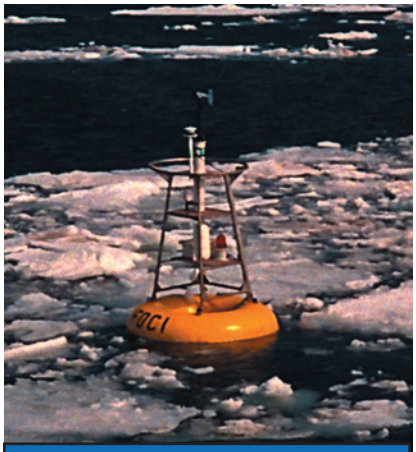
SATLINK2 40 W TRANSMITTER

NESDIS CERTIFIED

- Ideal for Buoy Applications
- Pocket PC Communications
- 4 Analog & Up to 10 SDI-12 Interfaces



The SL2-B40W-1 has been certified at 40 Watts on GOES 100/300/1200 bps and International DCS (GOES/METEOSAT/GMS)

The 40 Watt power level is highly suited for operation on a moving platform or station, such as a buoy, that requires a low gain omni-directional antenna.

SATLINK2 40 Watts may be used with an optional, non-mounted display:

- Adds dual communication capability to SatLink2
- Dimensions: 5 1/2" x 6 1/2" x 1"
- Optional internal modem
- Can force a transmission
- Communications: 3 RS232 ports (one to connect to Satlink 2, one to a PC or PDA, & one to an external modem)

SL2-B40W-1 BASIC FEATURES

- NESDIS Certified for 40 watts (Fixed) output for 100, 300 &1200 bps
- Domestic Scheduled or Random Transmissions
- International Channel Operation
- Operation certified for use with 3 or 3.5 dB gain omni-directional antenna.
- Ideal for Buoy Applications providing typical uplink EIRPs of 49dBm or 50dBm with typical cables.
- No additional operator setup fields required for operation
- User programmable from Pocket PC, desktop/laptop PC
- Built-in logger - 120,000 readings from any sensor to Flash Memory
- 4 Analog Inputs for single-ended & differential input sensors
- Gain setting options on Analog inputs
- SDI-12 support facilitates a vast array of sensors
- Reference voltage output for direct thermistor support
- Internal flash log can be downloaded @ 115200 Baud.
- Forward and reflected RF power measured.
- Powerful mathematical equation editor for analog sensor data conversion with polynomial & trigonometric support
- Dedicated Tipping Bucket Input
- Scheduled & random (event driven) reporting & alarm detection
- Easy Data Merge allows SatLink to make & log its own measurements AND receive data from another logger
- Every unit includes Trimble GPS module with fast satellite acquisition
- Standard RS232 interface to data recorder
- Easy integration with Sutron 8210, 8080 Xpert, 9210 XLite, 8400 & 8200 Dataloggers
- Serial port for quick and easy firmware & field software upgrades
- Internal diagnostics to monitor transmission quality and GPS performance
- Text messages & manual data entry
- DC power cables provided

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BASIC LOGGER SPECIFICATIONS	
MEASUREMENTS	
Analog Inputs	4 single ended (0-5V, differential ratiometric selectable)
A/D Resolution	24 bit A/D converter
A/D Accuracy	+/- 0.02% FS @25C +/- 0.03% FS @ 25 during TX
Temperature Coeff	+/- 5 ppm/C typ. +/- 10 ppm/C max
Linearity	+/- 0.005% FS
Reference Output	2.5 Volt, 10 ma. max (for temperature sensors)
Tipping Bucket	Dedicated switch closure counter intput
SDI-12: V1.0, V1.1, V1.2, V1.3 sensors	
Supports 10 sensors or measurements	
Independent measurement schedules for each sensor	
User enterable labels for sensors	
Powerful Mathematical Equation Editor for analog sensor data conversion allows user entry of virtually any equation	
Manually entered readings	
LOG	
120,000 readings	
Individual time stamped - 1 sec. resolution	
Can log numbers as small as 1E-38 or as large as 3E+38	
Quality flag for each data sample	
Non-volatile flash memory log	
Data Merge Mode supports merging of SatLink Logger data with data from external logger prior to transmission	
Circular Buffer Mode - enhanced transmission data mgt. Excess data is stored & sent on subsequent transmissions.	
ALARMS	
User configurable for each sensor	
High Alarms, Low Alarms, Rate of Change Alarms	
SATELLITE SUPPORT	
GOES 100/300/1200 bps	INSAT
International DCS (GOES/METEOSAT/GMS)	
TRANSMISSION SUPPORT	
SHEF	SHEFFIX
Pseudo Binary	
MISCELLANEOUS	
Non-volatile storage of configuration	
Visual indication of data collection	
Windows based setup utility	
GPS support for accurate time	

TRANSMITTER SPECIFICATIONS	
Weight	2.2 lbs.
Size	5.55 in. x 7.70 in. x 3.5 in. (not including mounting ears)
Environmental	-40°C to +65°C
Operating Voltage	10.5 to 15 VDC, reverse voltage protected
LED Indicators	Status, Fault & Transmit
CONNECTIONS	
Power	Built-in cable
GPS	SMA (Bulkhead Mounted)
RS232	DB9
SDI-12	5 position removable terminal strip
Tipping Bucket	5 position removable terminal strip
Analog Input	7 position removable terminal strip
Timekeeping	Accurate within 10 ms.
	Frequency discipline to within 10Hz typ
POWER REQUIREMENTS (@ 12.5 VDC)	
Quiescent	6 mA (typ) Quiescent power applies using Sutron Kit 6661-1261-1 (or other) to control DC power to amplifier.
Transmitting	8.6 Amps (typ) at 40 Watts 100/300/1200 BPS
RECOMMENDED ANTENNA	
5000-0020-1	Omni Half Wave Satellite Antenna
5000-0021-1	Omni Full Wave Satellite Antenna
TRANSMISSION FORMAT	
SHEF & Pseudo Binary formats	
INSAT 422 bit format	
Meteosat	
TRANSMISSION MODES	
100 BPS GOES random and self-timed	
300 BPS GOES random and self-timed	
1200 BPS GOES random and self-timed	
TRANSMITTER OUTPUT POWER	
40 Watt nominal, 100/300/1200 BPS	
Protection against open or short circuit loads on transmitter output	

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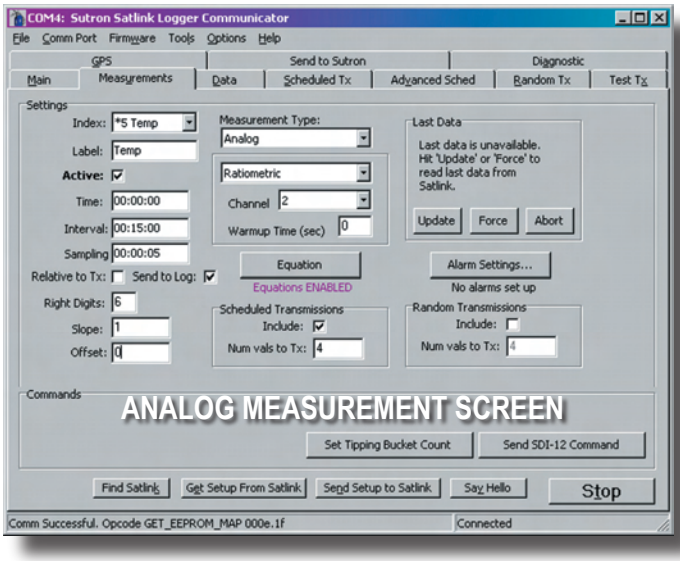
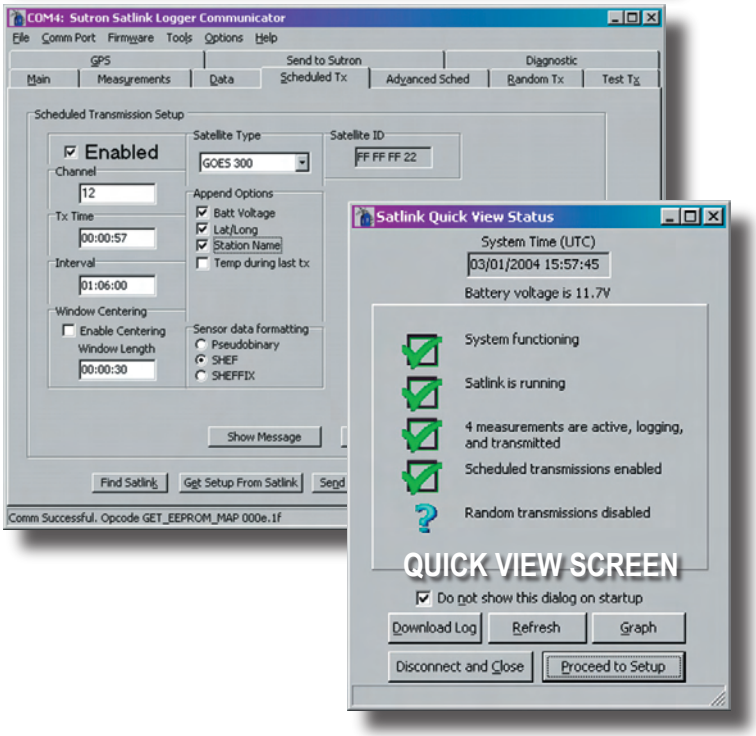
ORDERING

SL2-B40W-1	40 Watt SatLink GOES High Data Rate Transmitter *See *Note 1*
6661-1261-1	Amplifier DC Switch Kit
No Charge	Software for Pocket PC
6661-1248-1	SDI-12 Analog Module
6661-1258	Bluetooth Cordless Serial Adapter
8111-1113-1	RF COAX Cable Lightning Protection Kit. Bulkhead mount with 36" RG-58 N to N cable
ANTENNA OPTIONS	
5000-0020-1	Omni Half Wave Satellite Antenna
5000-0021-1	Omni Full Wave Satellite Antenna
5000-0170	Jam Resistant GPS Antenna (Bullet Antenna)
6211-1209-1	Mounting Kit for Jam Resistant GPS Antenna
2271-1061-1	Tower Mount Arm (uni-strut solid wall) for GPS Antenna
6411-1561-1	5 Meter GPS Bullet Antenna Cable
6411-1561-2	10 Meter GPS Bullet Antenna Cable





NOTE 1

The System requires another payload to control DC power to the amplifier to minimize quiescent current consumption. If no controller is present, order Kit #6661-1261-1 that allows SatLink automatic control of the DC power to the amplifier.

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