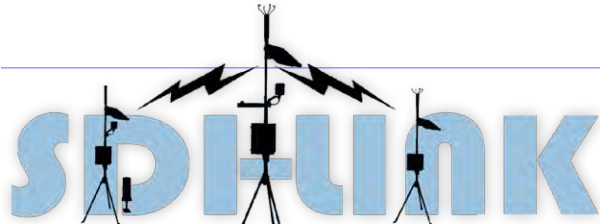


The SDI-Link is composed of two parts -- Master Modules that connect to SDI-12 Data Loggers & Slave Modules that connect to SDI-12 Sensors.



DESCRIPTION

- ▶ Sutron's SDI-Link provides a way for an SDI-12 data recorder to read one or more SDI-12 sensors located up to 1 mile away using unlicensed band radios.
- ▶ The SDI-Link is fully SDI-12 V1.3 compliant and will work with any compliant sensor and data recorder.
- ▶ The extended range of up to 1 mile LOS (line of sight) allows the user to get data from sensors that previously would have required a separate data recorder or long, expensive cables.
- ▶ Able to communicate using SDI-12 or RS-232 mode
- ▶ The SDI-Link comes in a NEMA-4 rated enclosure with built-in antenna that easily mounts outdoors on a wall or pipe.
- ▶ The SDI-Link comes in two basic models – a master (WSDI-M) that connects to the data recorder and a slave (WSDI-S) that connects to sensors.
- ▶ The slave model of the SDI-Link includes a battery charger so all you need to add for a standalone, remote sensor is a battery and solar panel.



GENERAL SPECIFICATIONS FOR ALL VERSIONS

OPERATING TEMPERATURE RANGE	-40° C to +60° C
ELECTRICAL	
Operating Voltage	10-16 VDC
Solar Panel Regulator	Supports up to 20 watts
Power Consumption	WSDI-S 6 mA average typical WSDI-M 7mA average typical
Protocol	SDI-12 V1.3
RS 232	Available for setup and transparent mode
RADIO RANGE	Range: Up to 1 mile Line of Sight (LOS) 5 dBi antenna built-in 8.5 dBi optional antenna with cable Frequency: 2.4GHz, unlicensed band
PHYSICAL	NEMA 4X lockable enclosure
Dimensions	7.5" x 7.5" x 5" plus 6" for antenna
Cable Glands	Two water tight PG9 for 0.16-0.31" diameter cables One Water Tight ½" NPT for 0.20-0.35" diameter cables
LED Status	LED to indicate network activity
OTHER KEY FEATURES	Received signal strength indicator for master and slave Always on and ready for SDI-12 communications Optional I/O board for direct sensor measurements One Master can operate up to 10 Slaves.

ORDERING

WSDI-M	SDI-Link Master
WSDI-S	SDI-Link Slave
WSDI-SIO	SDI-Link Slave with I/O
5100-0030	7 Amp-hr Battery (order cable separately)
5100-0040	24 Amp-hr Battery (order cable separately)
5100-0410-1	20 Watt Solar Panel with mount (order cable separately)
6661-1300-1	Mounting Bracket Kit
6661-1306-20	8.5 dB Omni Kit w/20 ft. cable (mounts on poles up to 2" diameter or on flat surfaces)

WSDI-SIO SPECIFICATIONS

A/D	
Reference	2.5 volt reference, +/- 10 mv, 19 mA max
Reference Temperature Coefficient	10 ppm/°C max
A/D Number of Bits	24
Switched Batt	Short Protected
SINGLE ENDED INPUTS	2 CHANNELS
Full Scale	0 to 5 Volts
Resolution	0.298 uV
Noise (p/p) @25° C	6.5 uV (p/p)
Noise (rms) @ 25° C	3.4 uV RMS
Accuracy @ 25° C	0.02% FS
Input Impedance	>2M Ohm
DIFFERENTIAL INPUTS	3 CHANNELS
Full Scale	+/- 0.0390625 V
Resolution	4.657 nV
Noise (p/p) @ 25° C	1.6 uV (p/p)
Noise (rms) @ 25° C	0.38 uV
Accuracy @ 25° C	<.01% ratiometric
Input Impedance	>3M Ohm
4-20mA INPUT	1 CHANNEL
Full Scale	20mA
Resolution	<1mA
Accuracy @ 25° C	.02% FS
24 Volt Current Loop Pwr	24 Volt +/- 5%, short protected
FREQUENCY/COUNTER INPUT	1 CHANNEL
Voltage	0-5 V
Max Frequency	10 KHZ