# XLite 9210 Datalogger & Controller Models with Enclosures



## **Overview**

The XLite 9210 Datalogger, a high performance data recorder & communications device for unattended, remote data acquisition, control & communications, is a multi-tasking logger with a 32-bit processor capable of making measurements & communicating simultaneously.

### **Features**

- Removable Media Support
  - SD Cards
  - MMC Cards
  - USB Thumb Drives
- 65 MB built-In non-volatile memory (1 to 3 million readings.) 32MB Flash Memory for log & configuration files . Expandable via SD Cards.
- 32-Bit Processor
- Built-in Ethernet
- Multiple Communications Simultaneously
- Unparalleled Sensor Support
  - XLite provides unparalleled sensor support through expansive I/O's & built-in program libraries. Analog & digital modules plug into the I<sup>2</sup>C port. Support is also provided for single voltage, differential voltage, resistance, 4-20mA, frequency, counter, binary, binary alarm, greycode binary, smart serial (RS-232 and RS-485), SDI-12, etc.
  - With 32 MB of Flash disk for storage, the Xpert also has 4 communications serial ports for satellite transmitters, modems, radios & other serial communication devices.
  - ▶ Get data w/any communication interface, USB or SD memory card.

# Robust Logging

XLite boasts 32 MB built-in memory expandable via removeable media. Logged data is compressed and not affected by changes to the Setup. System events are logged independently of measurement data.

# Flexible Scheduling

Each measurement can be independently scheduled. Sample intervals can be set from 1 sec. to 24 hr., in 1-second increments. Built-in functions to support min, max, average, & accumulation calculations included.

# Event Driven Processing

Digital inputs can be configured to trigger measurement processing, including logging and telemetry transactions.

## Easy to Use Display

Xlite provides a 2-line LCD character display & 3 front panel control buttons, making it very simple to view data & make minor Setup changes in the field.

# Intuitive Set-Up

System Setup & configuration uses Sutron's XTerm, with the same interface as Sutron's Xpert (based on Microsoft Windows CE, intuitive & easy to use).



# **Applications**

- Meteorology and Climatology
- Agrometeorology
- Natural Resources
- Oceanography
- Aviation (AWOS)
- Disaster Warning
- Water Level and Flow
- Water Quality
- Hydrology
- Air Quality
- Visibility
- Geotechnical
  - ✓ Dam Safety
  - ✓ Structural Stability
- Structures
- Energy
  - ✓ Solar Farm
  - ✓ Wind Farm

Sutron Corporation	XLite 9210 Datalogg	er/Controller M	
SPE	CIFICATIONS		
Specifications sub	oject to change without	notice.	
Measurement Interval	1.0 second to 24 hours	s (programmable)	
Measurements Supported		Unlimited	
Analog Channels	10		
Input Voltage	· ·	-0.1 to 5V with respect to ground,	
(Common Mode)	single ended or different	entiai	
Range	0-5 V, ± 78 mV (with r	espect to	
Single-Ended	ground)		
Differential	±2.5V, ±78 mV (+ inpu	ıt with respect	
Differential	to -input)		
Accuracy	0.002% of 5V typ 0.003% of 78mV typ		
Resolution	16 bit		
Expandable	via 1 <sup>2</sup> C & SDI-12	via 1 <sup>2</sup> C & SDI-12	
Digital Inputs/Outputs	8 (6 Bi-Directional, 2 input only)		
	Status, counter, frequency &		
Functions Supported	quadrature inputs		
Max Frequency	Channel 1, 8KHz; other channels 1KHz		
Low Level AC Inputs	Channels 7 & 8 support low level AC		
Support	frequencies (e.g. RMY	oung)	
Output Type	Open collector with 100 ohm current limiting resistor, 100 mA max, 15V max		
Output Type			
Expandable	via I <sup>2</sup> C and SDI-12		
	via i C alia 3DI-12		
Excitation Channels	5 Channels		
	Precision Voltage Ref	erence, switched	
Type(s)	battery, switched +5, protected +12V,		
	protected +5V		
Communication Ports	4 RS232 for communications		
	Satlink3, Sutron Data & Voice Modem,		
Telemetry	Radio, Direct Connect, GPRS, IRIDIUM,		
	MODBUS, & custom devices via BASIC		
Communications	4 Simultaneous Communications		
Operating Temperature	-40°C to +60°C		
Display Operating Temp.	LCD operates to -20°C		
3 1	2x20 character sunlight-readable		
Display Type	backlit LCD		
Keypad Type	3 buttons		
Memory			
ricinory	65MB (1- 3 ,000,000 readings), RAM:		
Built-In Non-Volatile	32 MB		
	For download data and read/write		
SD/MMC Card	SD/MMC Card For download data and read/write setups or additional log memory		
Ethornot			
Ethernet	Built in Ethernet support		
Clock Accuracy	5.4 sec/month (at 0°C - 40°C)		
Power Requirements	10-16VDC (20VDC ma		
Current Drain	Typically 3mA standb	-	
Communication B	SSP (Sutron Standard Protocol), MODBUS, MODEM, Telnet, HTTP, FTP, DHCP, DNS, SLIP, PPP, & custom via		
Communication Protocols Supported			
Supported	Basic (RS-232, TCP, &		
	Menu-driven setup, Expanded		
Programming	complexity via BASIC, Custom		
	capability via C++		
DIMENSIONS	STANDARD	SHIPPING	
Height	16" (40.7 cm)	26"(66 cm)	
Length	14" (35.6 cm)	20" (51 cm)	
Width	8" (20.4 cm)	12" (30.5 cm)	
Weight	15.3 lbs. (7 Kg)	20 lbs. (9.1 Kg)	

9210-SL3-ENC-M  Xlite Data Recorder with SatLink3, in Enclosure  9210-SL3-ENC-M  Xlite Data Recorder with SatLink3, in Enclosure, With Modem  9210-SL3-2B  Xlite Data Recorder with SatLink3 Transmitter, (replaces the 9210-SL2-1A & 2A)  XPERT/XLITE I/O MODULES  8080-0002-1  Digital I/O Module, 8 Channels Auto reset after surge.  Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  Precision Analog I/O Module 6 Channels Auto reset after surge.  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cable Surge Protection.  Xpert Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog	XLITE	with ENCLOSURE ORDERING	
9210-SL2-ENC-M Xlite Datlogger with Satlink-2, in Enclosure 9210-SL3-ENC-M Xlite Data Recorder with SatLink3, in Enclosure 9210-SL3-ENC-M Xlite Data Recorder with SatLink3, in Enclosure 9210-SL3-ENC-M Xlite Data Recorder with SatLink3, in Enclosure With Modem 9210-SL3-ENC-M Xlite Data Recorder with SatLink3, in Enclosure, With Modem 9210-SL3-2B XPERT/XLITE I/O MODULES 8080-0002-1 Digital I/O Module, 8 Channels Auto reset after surge. 8080-0002-4 Digital I/O Module w/Surge Protection. Multi- stage circuitry & auto reset after surge. 8080-0003-1 Precision Analog I/O Module, 6 Channels Auto reset after surge. 8080-0003-3 Precision Analog I/O Module, 10 Channels, 16 bit Surge Protection. Auto reset after surge. 24" cabl 8080-0005-1 Voice Modem Module Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors, (For. NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  5DI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  6461-1240-1T Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Fermination for 1 sensor with RS-232 output. Digital Surge Protection Module for sensors with digital outputs.  4661-1239-1T Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY 6661-1293 SD Card W/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module Telephone modem W,34, V,42bis	7.2		
9210-SL2-ENC-M  Xilite Datalogger with Satlink-2, in Enclosure, With Modem  9210-SL3-ENC-B  Xilite Data Recorder with SatLink3, in Enclosure, With Modem  9210-SL3-ENC-M  Xilite Data Recorder with SatLink3, in Enclosure, With Modem  9210-SL3-2B  Xilite Data Recorder with SatLink3 Transmitter, (replaces the 9210-SL2-IA & 2A)  XPERT/XLITE I/O MODULES  8080-0002-1  Digital I/O Module, 8 Channels Auto reset after surge.  8080-0002-4  Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  8080-0003-1  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge.  8080-0003-3  Precision Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  8080-0005-1  Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather Jackage w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic. Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module  Provides connection for two SDI sensors, surge protection.  6461-1241-2T  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module  Channels to monitor solar panel voltage, battery voltage, AC.  6461-1239-1T  RS232 Surge Protection Module  Channels to monitor solar panel voltage, battery voltage, AC.  6461-1238-2T  Digital Surge Protection Module  for sensors with digital outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module Telephone modem/v.34, v.42bis  8080-0005-1B	9210-ENC-B	Xlite Datalogger in Enclosure	
Modem	9210-SL2-ENC-B	Xlite Datlogger with Satlink-2, in Enclosure	
9210-SL3-ENC-M  Xiite Data Recorder with SatLink3, in Enclosure, With Modem  9210-SL3-2B  XIIte Data Recorder with SatLink3 Transmitter, (replaces the 9210-SL2-1A & 2A)  XPERT/XLITE I/O MODULES  8080-0002-1  Digital I/O Module, 8 Channels Auto reset after surge.  Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  8080-0003-1  Precision Analog I/O Module 6 Channels Auto reset after surge.  8080-0003-3  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Built-in surge protection.  8080-0007-1  Xpert Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  8080-0005-1  Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic. Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module  Provides connection for two SDI sensors, surge protection.  6461-1241-2T  Power Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module  Channels to monitor solar panel voltage, battery voltage, AC.  6461-1239-1T  RS232 Surge Protection Module  Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  ADDITIONAL MEMORY  6661-1237-1T  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module  Telephone modem,V.34, V.42bis	9210-SL2-ENC-M	Xlite Datalogger with Satlink-2, in Enclosure, With Modem	
9210-SL3-ENC-M With Modem  9210-SL3-2B Xlite Data Recorder with SatLink3 Transmitter, (replaces the 9210-SL2-1A & 2A)  XPERT/XLITE I/O MODULES  8080-0002-1 Digital I/O Module, 8 Channels Auto reset after surge.  8080-0002-4 Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  8080-0003-1 Precision Analog I/O Module 6 Channels Auto reset after surge.  8080-0003-3 Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Built-in surge protection.  8080-0007-1 Xpert Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  8080-0005-1 Voice Modem Module Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For. NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  6461-1241-2T Power Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  6461-1239-1T RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module Termination for 1 sensor with RS-232 output.  Analog Surge Protection Module for sensors with digital outputs.  ADDITIONAL MEMORY  6661-1293 SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  8080-0005-1B Voice Modem Module, King Radio voice module	9210-SL3-ENC-B	Xlite Data Recorder with SatLink3, in Enclosure	
XPERT/XLITE I/O MODULES  8080-0002-1 Digital I/O Module, 8 Channels Auto reset after surge.  8080-0002-4 Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  8080-0003-1 Precision Analog I/O Module 6 Channels Auto reset after surge.  8080-0003-3 Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Surge Protection.  8080-0005-1 Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS).  SURGE PROTECTION  SDI-12 Surge Protection Module  Provides connection for two SDI sensors, surge protection.  6461-1241-21 Telephone Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  6461-1239-1T Provides Protection Module Premination for 1 sensor with RS-232 output.  Digital Surge Protection Module Fermination for 1 sensor with RS-232 output.  Analog Surge Protection Module for sensors with digital outputs.  ADDITIONAL MEMORY  6661-1237-1T Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293 SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module	9210-SL3-ENC-M	, , , , , , , , , , , , , , , , , , , ,	
B080-0002-1 Digital I/O Module, 8 Channels Auto reset after surge.  B080-0002-4 Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  B080-0003-1 Precision Analog I/O Module 6 Channels Auto reset after surge.  B080-0003-3 Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Module, 10 Channels, 16 bit Built-in surge protection.  B080-0007-1 Voice Modem Module Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  G461-1240-1T Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  G461-1239-1T RS232 Surge Protection Module Termination for 1 sensor with RS-232 output. Digital Surge Protection Module for sensors with digital outputs.  ADDITIONAL MEMORY  G661-1293 SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module Telephone modem, V.34, V.42bis  Voice Modem Module, King Radio voice module	9210-SL3-2B	,	
Auto reset after surge.  B080-0002-1  B080-0002-4  Digital I/O Module w/Surge Protection. Multistage circuitry & auto reset after surge.  Precision Analog I/O Module 6 Channels Auto reset after surge.  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Surge Protection. Auto reset after surge. 24" cabl Surge Protection. Auto reset after surge. 24" cabl Wagnet Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  B080-0005-1  Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  G461-1241-21  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  G461-1239-1T  R5232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  APDITIONAL MEMORY  G661-1237-1T  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module	XPERT/XLITE I/O MODULES		
stage circuitry & auto reset after surge.  Precision Analog I/O Module 6 Channels Auto reset after surge.  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Edward Channels and Precision Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  8080-0005-1 Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  6461-1240-1T Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  6461-1239-1T RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module, King Radio voice module Telephone modem,V:34, V.42bis	8080-0002-1		
reset after surge.  Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cabl Apert Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  New Protection. Auto reset after surge. 24" cabl Apert Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  Precision Analog I/O Module, 10 Channels, 16 bit Built-in surge protection.  New Protection.  Protection Module (RAWS). Integrated Fire Weather Jo Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1237-1T  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  8080-0005-2B  Voice Modem Module, King Radio voice module	8080-0002-4		
Surge Protection. Auto reset after surge. 24" cabl  8080-0007-1	8080-0003-1		
Built-in surge protection.  8080-0005-1  Voice Modem Module  Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  G461-1240-1T  Power Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	8080-0003-3	Precision Analog I/O Module, 6 Channels with Surge Protection. Auto reset after surge. 24" cable.	
Fire Weather I/O Module (RAWS). Integrated Fire Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  G461-1240-1T  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	8080-0007-1		
Weather package w/digital I/O modules, analog I/O modules, voice modem & all connectors. (For NFDRS Update-Compliant Remote Automatic Weather Stations - RAWS)  SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  8080-0005-2B  Voice Modem Module, King Radio voice module	8080-0005-1	Voice Modem Module	
SURGE PROTECTION  SDI-12 Surge Protection Module Provides connection for two SDI sensors, surge protection.  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  8080-0005-1B  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	8080-0008-1	I/O modules, voice modem & all connectors. <u>(For NFDRS Update-Compliant Remote Automatic</u>	
Provides connection for two SDI sensors, surge protection.  6461-1240-1T  Telephone Surge Protection Module Connection, for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  8080-0005-1B  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module			
for one twisted pair.  Power Surge Protection Module Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	6461-1241-2T	Provides connection for two SDI sensors, surge	
Channels to monitor solar panel voltage, battery voltage, AC.  RS232 Surge Protection Module Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	6461-1240-1T		
Termination for 1 sensor with RS-232 output.  Digital Surge Protection Module for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	6461-1242-1T	Channels to monitor solar panel voltage, battery	
for sensors with digital outputs.  Analog Surge Protection Module for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293 SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  8080-0005-2B Voice Modem Module, King Radio voice module	6461-1239-1T	Termination for 1 sensor with RS-232 output.	
for sensors with analog outputs.  ADDITIONAL MEMORY  6661-1293 SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  8080-0005-1B Voice Modem Module Telephone modem,V.34, V.42bis  8080-0005-2B Voice Modem Module, King Radio voice module	6461-1238-2T		
SD Card w/2 Gig available mem.  COMMUNICATIONS MODULES/MODEMS  Voice Modem Module Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module	6461-1237-1T		
COMMUNICATIONS MODULES/MODEMS  8080-0005-1B	ADDITIONAL MEMORY		
8080-0005-1B Voice Modem Module Telephone modem,V.34, V.42bis Voice Modem Module, King Radio voice module	6661-1293	SD Card w/2 Gig available mem.	
Telephone modem,V.34, V.42bis  Voice Modem Module, King Radio voice module			
	8080-0005-1B		
ISBD-1-O Iridium Modem	8080-0005-2B	Voice Modem Module, King Radio voice module	
	ISBD-1-O	Iridium Modem	
GPRS-1-O GPRS Modem	GPRS-1-O	GPRS Modem	
SL3-XMTR-1 Satlink3 Transmitter for use with external datalogger	SL3-XMTR-1		