



Feature	8210 (Legacy Product)	7310	8310	9210	Xpert	X-Link	Satlink 2	Satlink 3
Ethernet	No	No	Yes	Yes	Yes	No	No	No
USB Serial	No	No	Yes	No	No	Yes	Yes	Yes
USB Memory	No	No	No	Yes	Yes	No	No	USB MICRO AB
SD Memory	No	Yes 2GB	Yes 2GB	Yes 2GB	Yes 2GB	No	No	Internal up to 32 GB
RS232	2	2	4	4 std, 8 Optional	4 std, 8 Optional	No	1	DB9
RS485	Yes	0	1	1 std, 4 Optional	1 std, 4 Optional	Yes (for SDI, Modbus slave)	No	Yes
Flash Log	No, log is battery backed-up RAM	32MB	32MB	32MB	32MB	240Kb	120,000 Readings	1,000,000 Readings
RTC	60 Sec/month	TCXO 10 Sec/Month Max -40 to +60C GPS option via Serial port and Basic	TCXO 10 Sec/Month Max -40 to +60C GPS option via Serial port and Basic	TCXO 10 Sec/Month Max -40 to +60C GPS option via Serial port and Basic	TCXO 10 Sec/Month Max -40 to +60C GPS option via Serial port and Basic	9.3sec/Month Max First Year 4.5Minutes/Year Max Ten Years (IridiumLink Time Sync to Iridium Network)	GPS synched to within 10mS UTC	GPS synched to within 10mS UTC
Satlink Option	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Iridium Option	No	Yes	Yes	Yes	Yes	Yes	No	Yes (Future)
GPRS Option	No	Yes	Yes	Yes	Yes	Yes	No	Yes (Future)
CDMA option	No	Yes	Yes	Yes	Yes	Yes	No	Yes (Future)
Wifi	via External device	via External device	via External device	via External device	via External device	Yes	via External device	Yes
Analog Inputs	qty 8, 13 bit A/D	qty 8, 16 bit A/D, dynamic range 23 bits	qty 8, 16 bits, dynamic range 23 bits	qty 8, 16 bits, dynamic range 23 bits	Unlimited with addition of external modules	qty 5, 24 bit	qty 4, 24 bit A/D	Analog 2 Single Ended Input, 3 Differential Inputs
4-20ma	via external resistor	built-in for 2 of the analog channels	built-in for 2 of the analog channels	via external resistor	via optional I/O module	built-in for 1 of the analog channels	via external resistor	1 input
Digital I/O	5 Input, 5 Output	4 Input 2 - Output Open collector with 100 ohm current limiting resistor, 100 mA, 15V max	4 Input 2 - Output Open collector with 100 ohm current limiting resistor, 100 mA, 15V max	8 Total (6 Bi-Directional, 2 Input only, 1 8Khz)	Unlimited with addition of external modules	2	1	2, 0-15 V, optional low level input. 2
Protection	Multistage input protection including varistor	Multistage input protection including spark gaps	Multistage input protection including spark gaps	Multistage input protection	Optional for each I/O module	Multistage input protection including spark gaps		1.0 A
Switched Power	1 - Switched Battery	2 - Switched Battery, Switched +5V	2 - Switched Battery, Switched +5V	1 - Switched Battery	Optional through I/O module	1 Switched Battery For Sensors Only	1 Switched Battery For Sensors Only	1.0 A (2 available)
I ² C Analog & Digital Module support	No	No	Yes	Yes	Yes	No	No	
WS Low Level AC	No	No	No	Yes - DIO channel 7 and 8	Optional though I/O module	No	No	No
Modbus Master	No	Yes	Yes	Yes	Yes	No	No	No
Modbus Slave	No	Yes	Yes	Yes	Yes	No	No	No
SDI Recorder	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SDI Sensor	No	No	No	No	No	No	No	No
Display	16 character LED	2x20 LCD	2x20 LCD	2x20 LCD	320x240 LCD	No	Optional 2x20 LCD	Optional 2x20 LCD
Keypad	6 buttons	6 buttons	6 buttons	3 buttons	touchscreen	Single button to wake & reboot	Optional 6 button	Optional 6 button
Operating Volt	10-16 VDC recommended	10-16 VDC recommended 20VDC MAX	10-16 VDC recommended 20VDC MAX	10-16 VDC recommended 20VDC MAX	10-16 VDC recommended 20VDC MAX	8-16VDC	10.4-15VDC	9-20 VDC, , 1.5A transmitting with 1.25W TX power
Standby current	1ma	3ma	3ma	<3ma	<3ma	2ma	8.2mA Typical	< 2 mA typ @12.5 VDC
Operating Current	30ma (display off)	70mA Display active 30mA active (display off)	70mA Display active 30mA active (display off)	230mA Display active 40mA active (display off)	140mA Display active 40mA active (display off)	20mA Active	300 bps (Typ.) 1200 bps (Typ.)	2.7 Amp 3.4 Amp
Solar Panel Regulator	No	20 watts	20 watts	No	No	30 watts	No	No
Removeable Term Strips	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Max Measurements		No limit	No limit	No limit	No limit	16	16	32
BASIC Programming	Tiny-Basic	Yes	Yes	Yes	Yes	No	No	Yes (Future)
C++ with SDK	No	Yes	Yes	Yes	Yes	No	No	No
Equations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GUI	No	No	No	Yes	Yes	Yes	Yes	Yes
Android App Available	No	No	No	No	No	Yes	No	Yes
Iphone App Available	No	No	No	No	No	Yes	No	Yes
Spanish		No	No	No	No	No	No	No
French		Voice	Voice	Voice	Voice	No	No	No
Telephone / Voice Modem	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
USB (OTG)	No	No	Yes	Yes	Yes	Yes	Yes	Yes
USB HOST	No	No	No	No	No	No	No	Yes
SD Card Port	No	No	Yes	No	No	No	Yes (with display)	Yes (with display)