

ABB monitoring and communications VSN730 System Monitor



The VSN730 System Monitor is a high-performance data collection and communication system that is ideal for small to medium commercial PV plant applications.

The VSN730 is the “lite” version of the VSN750 Plant Manager offering a basic set of features at the lowest price possible for a monitoring turnkey solution.

The turnkey solution saves the installer time (and money) by providing several components, prewired and preinstalled in an outdoor rated enclosure. It collects data and uploads information over the Internet in near real-time to the Aurora Vision® Plant Management Platform.

VSN730 System Monitor includes quality equipment for reliable monitoring

Included in this system is the VSN700 Data Logger (-03) which can monitor and provide data management for up to 10 ABB string inverters and one VSN800 weather station.

It also provides RS-485 surge protection, which on the RS-485 communication lines is a “must have” to offer protection against logger damage in electrically “dirty” environments. The 277VAC capable input power supply is ideal for commercial installations where only 3 phase 480VAC is easily available and inverter command and control for commercial and utility PV system operation, as well as SCADA integration.

Highlights

- VSN700-03 Data Logger
- Enclosed in a painted, steel NEMA 4/IP65 enclosure
- 85VAC to 305VAC / 24 VDC, 1A power supply
- Supports 10 ABB string inverters and a VSN800 weather station
- RS-485 surge protection
- Easy installation

Additional highlights

- Remote performance and asset management through the Aurora Vision® Plant Management Platform
- The turnkey solution saves the installer time (and money) by providing several components, prewired and preinstalled in an outdoor rated enclosure
- Remote management capabilities minimize truck rolls by providing configuration, upgrades, and debug over the Internet using the Aurora Vision® Plant Management Platform

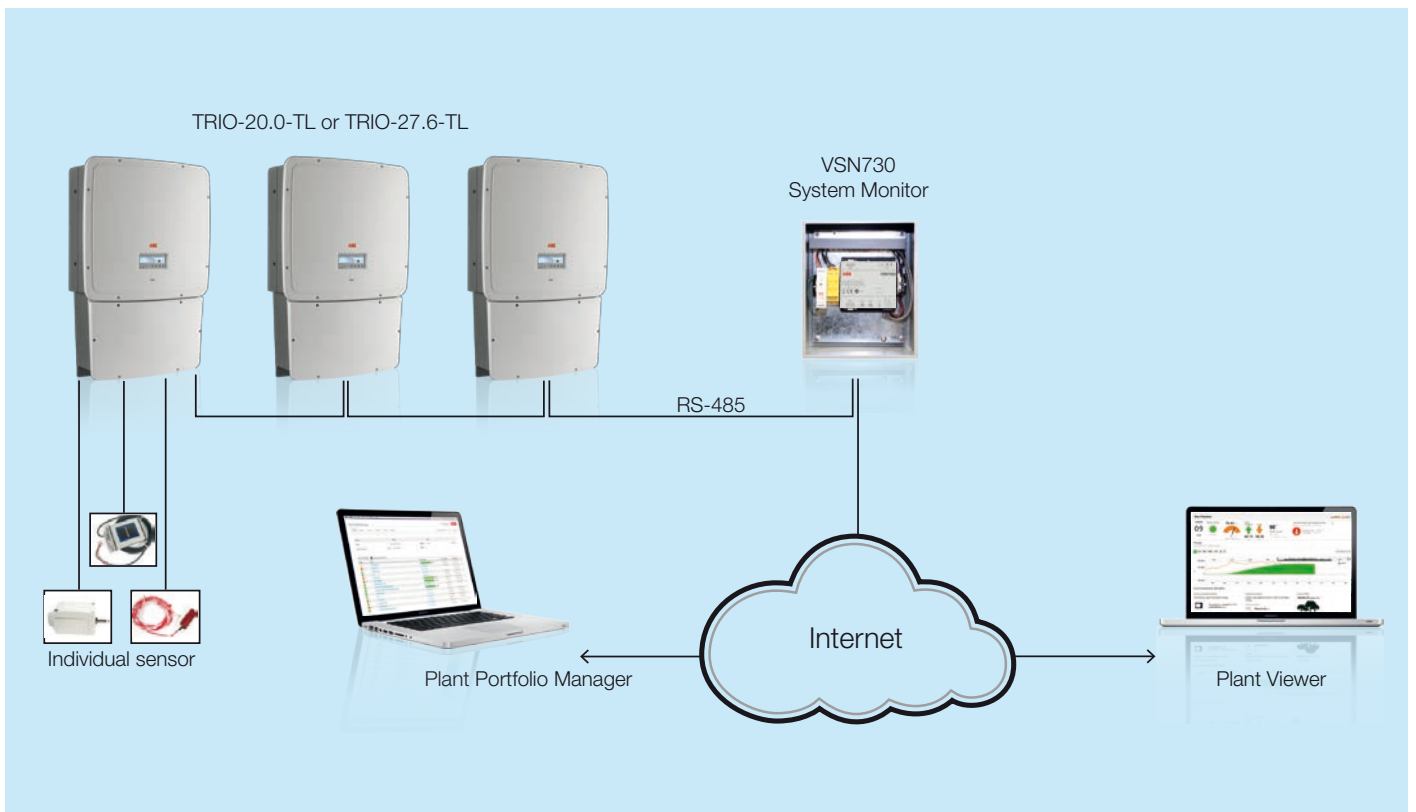


Technical data and types



Type code	VSN730 System Monitor
Platform	
Devices supported	10x ABB string inverters + 1x VSN800 Weather Station
Monitoring	Inverter direct, environmental sensors
Inverter control	None
Communication interfaces	
Serial port interface	(2) RS-485 + (1) RS-232
RS-485 port 1 configuration	Optically isolated repeater for Modbus or Aurora Protocol support
RS-485 port 2 configuration	Non-isolated Modbus or Aurora Protocol support
Maximum devices per serial port	11 devices, depending on poll rate and configuration
Fieldbus cable	RS-485 shielded twisted Pair. Recommend Belden # 1120A cable or # 3106A for 3 conductors
Ethernet port 0	Firewall protected Ethernet WAN port for internet connection
Ethernet port 1	Local LAN with static IP address
Ethernet connections	RJ-45 Ethernet 10/100 base-T (LAN/WAN)
Communication protocols	
Plant fieldbus protocols	Aurora Protocol, Modbus RTU, SunSpec
LAN/WAN protocols	Modbus/TCP, HTTP, DHCP, SSL, SSH, XML
Data logging specifications	
Data sampling rate	High frequency data sampling (less than 1 minute average)
Logging	Real time power values at 1,3,5, 15 minute configurable intervals
Local storage	Log data for 30 days based on 15-minute intervals. (Days logged may be reduced by intervals shorter than 7-minute)
Upgradeability	Field upgradable over the Internet or locally via USB memory stick
Communications surge protection	
Replaceable cartridge	Citel DLAM-06D3
Power supply	
DC power supply input	90 VAC to 264 VAC
DC power supply output	24VDC, 1A
Environmental protection rating	
Ambient temperature range	-20°C to 60°C
Environmental protection rating	NEMA 4
Relative humidity	0 to 100% condensing
Mechanical parameters	
Dimensions H x W X D	12" x 10" x 5" (.30m x .25m x .13m)
Enclosure options	Painted steel
Weight	14 lbs (6.4 kg)
Mounting System	Screws through flanges
Compliance	
Safety	UL508A
Marking	cCSAus / CE
Altitude	Operate below 3000m
Emission	FCC Part 15 Class A, CISPR 22, EN 55022 Conducted and Radiated Emission
Immunity	EN 61000, EN55024
Telecom	N/A

Remark. Features not specifically listed in the present data sheet are not included in the product

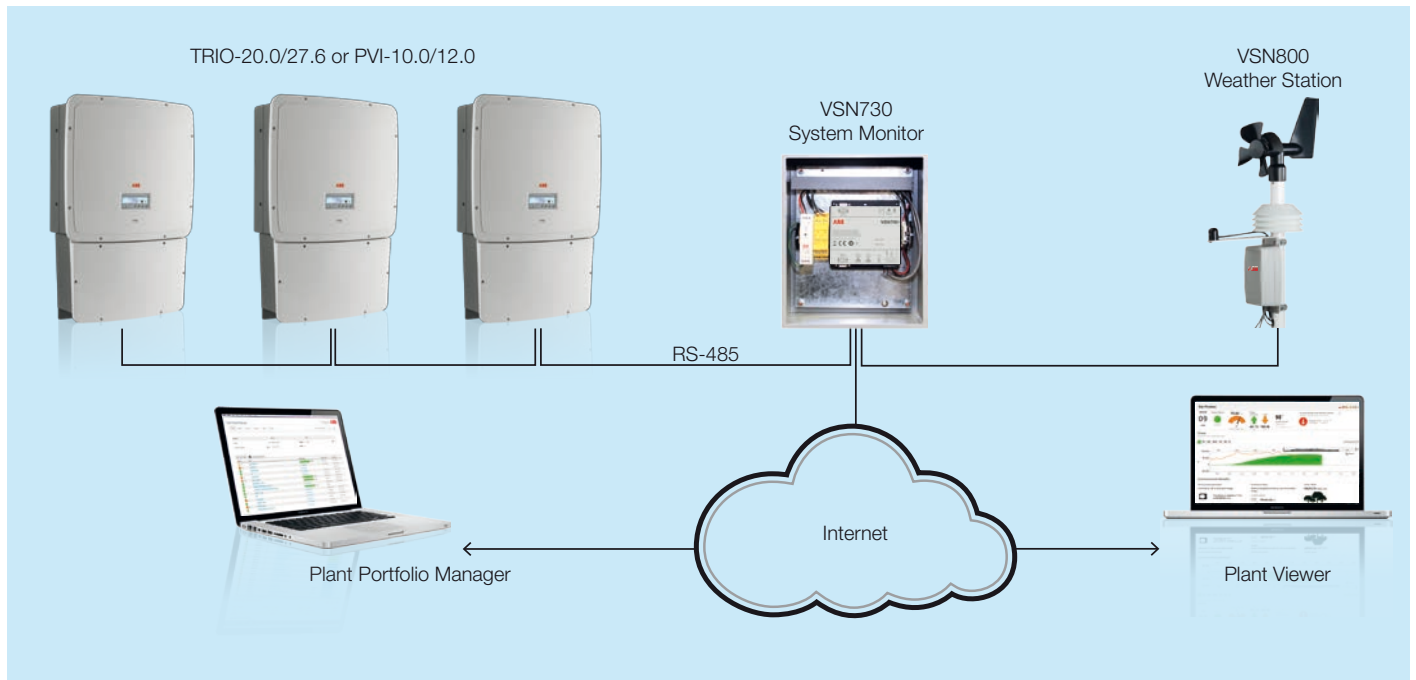
Commercial application with VSN730 System Monitor using individual weather sensors



VSN730 - Accessories

<p>VSN800-12</p>	<p>Weather Station with sensors: ambient temperature , panel temperture, global irradiance</p>	
<p>VSN800-14</p>	<p>Weather Station with sensors: ambient temperature, panel temperature, global irradiance, plane of array irradiance, wind speed & direction</p>	

Commercial application with VSN730 System Monitor using VSN800 Weather Station



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