



Experience in **developing** and **manufacturing** measurement equipment **since 1989**



SYMMETRON PRODUCT CATALOG


CONTENTS

1. PRODUCTS ORDERED BY MEASURING APPLICATION.....	3
A. WIND ENERGY ASSESSMENT	3
B. SOLAR PLANT MONITORING.....	5
C. ENERGY/POWER MONITORING.....	7
D. DATA TRANSMISSION.....	8
E. OTHER SOFTWARE.....	8
F. MISCELLANEOUS SENSORS AND ACCESSORIES.....	9
2. PRODUCTS ORDERED BY EQUIPMENT TYPE.....	10
A. DATA LOGGERS.....	10
B. SENSORS	11
C. MODEMS	13
D. OTHER SOFTWARE.....	13
E. ACCESSORIES	14
CONTACT INFORMATION	15


1. PRODUCTS ORDERED BY MEASURING APPLICATION

A. WIND ENERGY ASSESSMENT


Symmetron Stylitis-10 data logger,

	<p>Versatile data logger with 8 I/O, for measurement in up to 2 heights, and 10 digital bus (MODBUS RTU/ SDI-12) nodes. Versions with internal communication modules:</p> <ul style="list-style-type: none"> - GSM: GPRS communication via a low-cost dynamic IP SIM card (no static IP SIM needed). GSM data calls also supported. SMS/Email alarms, daily data emails. Data sent to web database. - Ethernet. Email alarms, daily data emails. Data sent to web database. No static IP internet connection needed. - Wi-Fi. Same with Ethernet. 	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Symmetron Stylitis-41 data logger, for measurement in up to 3 heights



	<p>Data logger suitable for Meteorological, Wind/Hydro, etc measurements, with 3 counters and 4 analog channels. Practically unlimited data storage with up to 2GB CF cards. Data sent to web database. Optional remote GPRS communication, via a low-cost dynamic IP SIM card (no static IP SIM needed) and encrypted data emails via Sym-o-net modem. GSM data calls also supported.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Symmetron Stylitis-101 data logger, for measurement in up to 6 heights


	<p>Advanced, portable data logger covering a wide range of measurement and recording needs, with 6 counters, 18 analog and 3 digital channels. Time-series recording option, suitable for wind turbine power curve analysis. Individual channel recording rates 1~32Hz. Practically unlimited data storage with up to 2GB CF cards. Data sent to web database. Remote GPRS communication, via a low-cost dynamic IP SIM card (no static IP SIM needed) and encrypted data emails via optional Sym-o-net modem. GSM data calls also supported.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Anemometers


	<p>NRG #40C</p>	<p>3-cup, low-level AC, calibrated anemometer.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
	<p>Second Wind C3</p>	<p>3-cup, low-level AC anemometer.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
	<p>Vector A100LK</p>	<p>First Class, TTL level, low power anemometer.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure

	RM Young 05103 anemometer/ wind vane	High Performance Wind Sensor: Anemometer: low-level AC output Wind Vane: 10K Ω potentiometer	<u>Documentation</u> - Webpage - Brochure
	RM Young 27106T vertical component anemometer	Vertical wind component propeller anemometer Output signal: Signed Analog DC voltage (the sign indicating wind direction)	<u>Documentation</u> - Webpage - Brochure




Symmetron TROPOS Series converters: anemometer signal to voltage or current

	These converters receive as input a <i>low-level AC</i> (AC >80mV) or a <i>reed switch anemometer output signal</i> . Linear conversion of frequency ranges: 0~40Hz to: 0~10V, 0~2.5V, 0~5V, 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Symmetron WITOC100 frequency to current converter

	Frequency to current converter/transmitter. Converts 0~100Hz to 4~20mA.	<u>Documentation</u> - Webpage - Brochure
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Wind Vanes

	NRG #200P	Precision wind vane, potentiometric10k Ω	<u>Documentation</u> - Webpage - Brochure
	Vector W200P	Precision wind vane, potentiometric1k Ω	<u>Documentation</u> - Webpage - Brochure
	RM Young 05103 anemometer/ wind vane	High Performance Wind Sensor: Anemometer: low-level AC output Wind Vane: 10K Ω potentiometer	<u>Documentation</u> - Webpage - Brochure




Symmetron TROPOS-5V-C converter: wind vane voltage signal to current


	This converter receives as input a <i>voltage output signal</i> of a wind vane , with reference voltage 5V . Linear conversion of 0~5V to 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Symmetron VOTOC3 voltage to current converter


	Voltage-to-current converter/transmitter. Converts 0~4.5VDC or 0~2VDC to 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Temperature-Humidity-Barometric Pressure sensors


	Symmetron THERMOS	PT100/PT1000 external temperature sensor. Resistor for voltage excitation included.	<u>Documentation</u> - Webpage - Brochure
	Symmetron THYGRO	Accurate calibration-free Temperature- Humidity sensor Temperature sensor: PT1000. Resistor for voltage excitation included. Humidity Sensor range: 0 ... 100 % RH. Output: 0~1V or 0~5V	<u>Documentation</u> - Webpage - Brochure
	Symmetron YGRO	Accurate calibration-free Humidity sensor. Range: 0 ... 100 % RH. Output: 0~1V or 0~5V.	<u>Documentation</u> - Webpage - Brochure

	Symmetron BARON	Calibrated barometric pressure sensor. Range: 150 ... 1150 mbar. Output: 0~2.5V or 0~5V.	<u>Documentation</u> - Webpage - Brochure
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JUMO dTRANS PT100 converters


	These converters receive as input a <i>voltage PT100 output signal</i> and converts it linearly to 0~10V (amplification) or to 4~20mA	<u>Documentation</u> - 0~10V converters Webpage - 4~20mA converters Webpage - dTRANS converters Brochure
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Symmetron VeriVane, an instrument for calibration and operation verification of wind vanes




	An instrument for quick and easy testing, verification and calibration of Wind Vanes, which rotates the vane via a step motor, and measures vane output in every position. Self-verification of the instrument can also be performed. Full calibration can also be performed, ie calculation of the vane's dead band and of correction factors (Slope and Offset) to be applied.	<u>Documentation</u> - Webpage - Brochure - Manual	<u>Free software</u> - VeriVane v2.1.2.2 USB Windows Driver (Executable) - USB Windows Driver (CD-ROM)
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B. SOLAR PLANT MONITORING


Symmetron Stylitis-10 data logger

	Versatile data logger with 8 I/O, and 10 digital bus (MODBUS RTU/ SDI-12) nodes, for inverter data retrieval. Versions with internal communication modules: - GSM : GPRS communication via a low-cost dynamic IP SIM card (no static IP SIM needed). GSM data calls also supported. SMS/Email alarms, daily data emails. Data sent to web database. - Ethernet . Email alarms, daily data emails. Data sent to web database. No static IP internet connection needed. - Wi-Fi . Same with Ethernet.	<u>Documentation</u> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation	<u>Free software</u> - Opton 4 - AutoConnect
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Pyranometers

	Apogee SP-110	Voltage output pyranometer: 0~350mV. No signal amplification is needed with Stylitis data loggers.	<u>Documentation</u> - Webpage - Brochure
	Soluzione Solare Litemeter Current	4~20mA output pyranometer	<u>Documentation</u> - Webpage - Brochure
	LiCor LI-200SZ	Low voltage output pyranometer: 0~20mV. Signal amplification may be needed, for better accuracy, via the corresponding <i>Symmetron converters</i> .	<u>Documentation</u> - Webpage - Brochure


Symmetron TROPOS Series converters: **pyranometer signal to voltage or current**

	These converters receive as input a <i>low voltage pyranometer output signal</i> (0~20mV) and converts it linearly to 0~2.5V, 0~5V (amplification) or to 4~20mA.	<u>Documentation</u> - Webpage - Brochure
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Temperature-Humidity-Barometric Pressure sensors

	UTECO Series SUR PT100/PT1000	Voltage output (PT100/PT1000) panel Surface Temperature sensor. Temperature range: 50~150°C	Documentation - Webpage - Brochure
	UTECO Series SUR 4~20mA	Current output (4~20mA) panel Surface Temperature sensor. Temperature range: 50~150°	Documentation - Webpage - Brochure
	Symmetron THERMOS	PT100/PT1000 external temperature sensor. Resistor for voltage excitation included.	Documentation - Webpage - Brochure
	Symmetron THYGRO	Accurate calibration-free Temperature- Humidity sensor Temperature sensor: PT1000. Resistor for voltage excitation included. Humidity Sensor range: 0 ... 100 % RH. Output: 0~1V or 0~5V	Documentation - Webpage - Brochure

JUMO dTRANS PT100 converters

	These converters receive as input a <i>voltage PT100 output signal</i> and converts it linearly to 0~10V (amplification) or to 4~20mA	Documentation - 0~10V converters Webpage - 4~20mA converters Webpage - dTRANS converters Brochure
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Second Wind C3 anemometer




	3-cup, low-level AC anemometer.	Documentation - Webpage - Brochure
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ABB DMTME-I-485 MODBUS RTU energy/power 3-phase multimeter


	Energy/power 3-phase multimeter, for inverter energy production monitoring. Measurements: AC voltage, current, power factor and active, reactive and apparent power and energy of a 3 phase line. Min, max and average values per 15 min. LCD screen display and MODBUS RTU serial communication.	Documentation - Webpage - Brochure
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1-phase and 3-phase pulsed Active Energy meters



	Vendor	Product	Input	Phases	Documentation	
	ABB	C11	Direct-9kW	1	Webpage	Brochure
	Revalco	1RCM1	Direct-6kW	1	Webpage	Brochure
	Revalco	1RCM263	Direct-63A	1	Webpage	Brochure
	ABB	ODIN4165	Direct-65A	3	Webpage	Brochure
	ABB	ODIN4110	Via CTs	3	Webpage	Brochure

C. ENERGY/POWER MONITORING

Symmetron Stylitis-Power data logger, for measurement in 10 3-phase lines

	<p>Data logger designed for advanced in-coming and out-coming power/energy analysis. Capable of isolating intensive loads, by locating transients and maximum consumed power.</p> <p>Channels: 1 3-phase+neutral voltage and 10 3-phase+neutral current channels. 1 CT per phase needed.</p> <p>Measurements: Active/Reactive/ Apparent energy and power, power factor, frequency, voltage and current.</p> <p>Standard built-in Ethernet module.</p> <p>Optional GSM/GPRS modem.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Magnelab Current Transformers

	Product	FS MEASURING RANGES	OUTPUT	<u>Documentation</u>	
	SCT-400	5A, 25A, 50A full scale	0.333V full scale	Webpage	Brochure
	SCT-750	100A, 200A, 400A, 600A full scale	0.333V full scale	Webpage	Brochure

Symmetron Stylitis-10 datalogger, for measurement in less 3-phase lines








	<p>Versatile data logger with 8 I/O, 10 digital bus (MODBUS RTU/SDI-12) nodes. Besides 1 CT per phase, up to 2 pulsed active energy meters and one MODBUS RTU multimeter per additional line are needed.</p> <p>Versions with internal communication modules:</p> <ul style="list-style-type: none"> - GSM: GPRS communication via a low-cost dynamic IP SIM card (no static IP SIM needed). GSM data calls also supported. SMS/Email alarms, daily data emails. Data sent to web database. - Ethernet. Email alarms, daily data emails. Data sent to web database. No static IP internet connection needed. - Wi-Fi. Same with Ethernet. 	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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ABB DMTME-I-485 MODBUS RTU energy/power 3-phase multimeter.

	<p>Energy/power 3-phase multimeter, Use one per 3-phase line with Stylitis-10 data logger. Measurements: AC voltage, current, power factor and active, reactive and apparent power and energy of a 3 phase line. Min, max and average values per 15 min.</p> <p>LCD screen display and MODBUS RTU serial communication.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
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1-phase and 3-phase pulsed Active Energy meters

	Vendor	Product	Input	Phases	<u>Documentation</u>	
	ABB	C11	Direct-9kW	1	Webpage	Brochure
	Revalco	1RCM1	Direct-6kW	1	Webpage	Brochure


	Revalco	1RCEM263	Direct-63A	1	Webpage	Brochure
	ABB	ODIN4165	Direct-65A	3	Webpage	Brochure
	ABB	ODIN4110	Via CTs	3	Webpage	Brochure

D. DATA TRANSMISSION


Symmetron Sym-o-net GSM/GPRS modem

	<p>GPRS modem, enabling GPRS communication with any serial device (along with Stylitis-41/101 data loggers) via a simple low-cost dynamic IP SIM card.</p> <p>Static IP connections and GSM data calls are also available. Encrypted data emails from loggers at least once a day are also available.</p> <p>Multiple Sym-o-nets around the globe may be configured as a virtual wireless RS-485 network via GPRS</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - User Guide - Presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - SymonetCOM - Opton 4
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Sierra Wireless FASTRACK XTEND GSM/GPRS modem

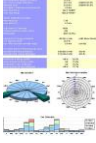
	<p>GSM/GPRS Modem 850/900/1800/1900 MHz.</p> <p>Both RS-232 and USB communication available.</p> <p>For USB connections, download the USB drivers and the Java Runtime Environment (JRE). Regardless if your windows are 32 or 64-bit, download the Windows x86 Offline one (32-bit)</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Fastrack Xtend USB Driver - Java Runtime Environment (JRE)
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Adeunis ARF53 Radio modem


	<p>500mW radio modem RS232/RS485, European version.</p> <p>Does not use the GSM network (no SIM card required).</p> <p>Wireless bidirectional data transmission up to 6km. Create a measuring network to communicate via one PC modem, with multiple logger modems.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Connection Guide
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E. OTHER SOFTWARE


CRES WindRose wind data analysis software

	<p>WindRose is a software tool, Add-In to the Microsoft Excel, dedicated to the analysis of wind characteristics (speed, direction, turbulence, temperature).</p> <p>Data analysis complies with the requirements imposed by the IEC and MEASNET standards.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Full version - 30-day trial
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Symmetron Diameson Gateway server

	<p>Server software which allows users connect to Symmetron data loggers and Sym-o-net modems via the GPRS network, via dynamic IP SIM cards.</p> <p>Use your own Diameson or Symmetron's Diameson as a service.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
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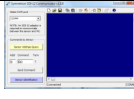
Symmetron Emmetron database software

	Software which consolidates resources, events and measurement data from Stylitis dataloggers into one integrated environment. Includes built-in query and report generators.	<u>Documentation</u> - Webpage - Presentation
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Symmetron Stylitis OPC Server


	Display real-time data from a Stylitis data logger to any SCADA, HMI or custom software package which adheres to the principles of an OPC client. Connect to the data logger via RS-232, RS-485, Ethernet	<u>Documentation</u> - Webpage	<u>Free software</u> Full version 15-day trial
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Symmetron SDI-12 Communicator


	Free software for communication with SDI-12 devices via PC. Send SDI-12 commands via a COM port.	<u>Free software</u> SDI-12 Communicator
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F. MISCELLANEOUS SENSORS AND ACCESSORIES


Symmetron Tiltometer

	Sensor which measures elevation and azimuth angles. Suitable for measuring the met mast's tilt or the solar tracker movement.	<u>Documentation</u> - Webpage - Brochure - User Manual
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NRG Rain Gauge rain height sensor.

	Tipping bucket rain gauge. Reed Switch Output	<u>Documentation</u> - Webpage - Brochure
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Symmetron Apeicon web server.

	External web server for Stylitis data loggers. It allows easy creation of custom web pages, complete with customer photos, logos and data from one or more data loggers. Connect up to 2 data loggers to Apeicon's serial ports and as many data loggers you wish in Apeicon's LAN.	<u>Documentation</u> - Webpage - Brochure
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Miscellaneous measurement accessories

Solar panels: 12V/20W, 12V/10W, 12V/5W. Battery charge controller: 12V/6A. Lead acid batteries: 12V/7.2Ah, 12V/12Ah. Antennas: Magnetic base, directional. LiYCY cables, etc	<u>Documentation</u> - Webpage
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2. PRODUCTS ORDERED BY EQUIPMENT TYPE

A. DATA LOGGERS


Symmetron Stylitis-10 data logger,

	<p>Versatile data logger with 8 I/O, for measurement in up to 2 heights, and 10 digital bus (MODBUS RTU/ SDI-12) nodes. SMS/Email alarms, daily data emails. Data sent to web database</p> <p>Versions with internal communication modules:</p> <ul style="list-style-type: none"> - GSM: GPRS communication via a low-cost dynamic IP SIM card (no static IP SIM needed). GSM data calls also supported. SMS/Email alarms, daily data emails. Data sent to web database. - Ethernet. Email alarms, daily data emails. Data sent to web database. No static IP internet connection needed. - Wi-Fi. Same with Ethernet. 	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Symmetron Stylitis-41 data logger

	<p>Data logger suitable for Meteorological, Wind/Hydro, etc measurements, with 3 counters and 4 analog channels. Practically unlimited data storage with up to 2GB CF cards. Data sent to web database.</p> <p>Optional remote GPRS communication, via a low-cost dynamic IP SIM card (no static IP SIM needed) and encrypted data emails via Sym-o-net modem. GSM data calls also supported.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Symmetron Stylitis-101 data logger






	<p>Advanced, portable data logger covering a wide range of measurement and recording needs, with 6 counters, 18 analog and 3 digital channels. Time-series recording option, suitable for wind turbine power curve analysis. Individual channel recording rates 1~32Hz. Practically unlimited data storage with up to 2GB CF cards. Data sent to web database.</p> <p>Remote GPRS communication, via a low-cost dynamic IP SIM card (no static IP SIM needed) and encrypted data emails via optional Sym-o-net modem. GSM data calls also supported.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Sensor Installation Guide - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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Symmetron Stylitis-Power data logger




	<p>Data logger designed for advanced in-coming and out-coming power/energy analysis. Capable of isolating intensive loads, by locating transients and maximum consumed power. Channels: 1 3-phase+neutral voltage and 10 3-phase+neutral current channels. 1 CT per phase needed. Measurements: Active/Reactive/ Apparent energy and power, power factor, frequency, voltage and current. Standard built-in Ethernet module. Optional GSM/GPRS modem.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Manual - Short and full presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Opton 4 - AutoConnect
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B. SENSORS






Anemometers


	NRG #40C	3-cup, low-level AC, calibrated anemometer.	<u>Documentation</u> - Webpage - Brochure
	Second Wind C3	3-cup, low-level AC anemometer.	<u>Documentation</u> - Webpage - Brochure
	Vector A100LK	First Class, TTL level, low power anemometer.	<u>Documentation</u> - Webpage - Brochure
	RM Young 05103 anemometer/ wind vane	High Performance Wind Sensor: Anemometer: low-level AC output Wind Vane: 10KΩ potentiometer	<u>Documentation</u> - Webpage - Brochure
	RM Young 27106T vertical component anemometer	Vertical wind component propeller anemometer Output signal: Signed Analog DC voltage (the sign indicating wind direction)	<u>Documentation</u> - Webpage - Brochure

Wind Vanes

	NRG #200P	Precision wind vane, potentiometric 10kΩ	<u>Documentation</u> - Webpage - Brochure
	Vector W200P	Precision wind vane, potentiometric 1kΩ	<u>Documentation</u> - Webpage - Brochure
	RM Young 05103 anemometer/ wind vane	High Performance Wind Sensor: Anemometer: low-level AC output Wind Vane: 10KΩ potentiometer	<u>Documentation</u> - Webpage - Brochure

Temperature-Humidity-Barometric Pressure sensors

	Symmetron THERMOS	PT100/PT1000 external temperature sensor. Resistor for voltage excitation included.	<u>Documentation</u> - Webpage - Brochure
	UTEKO Series SUR PT100/PT1000	Voltage output (PT100/PT1000) panel Surface Temperature sensor. Temperature range: 50~150°C	<u>Documentation</u> - Webpage - Brochure
	UTEKO Series SUR 4~20mA	Current output (4~20mA) panel Surface Temperature sensor. Temperature range: 50~150°	<u>Documentation</u> - Webpage - Brochure
	Symmetron THYGRO	Accurate calibration-free Temperature- Humidity sensor Temperature sensor: PT1000. Resistor for voltage excitation included. Humidity Sensor range: 0 ... 100 % RH. Output: 0~1V or 0~5V	<u>Documentation</u> - Webpage - Brochure
	Symmetron YGRO	Accurate calibration-free Humidity sensor. Range: 0 ... 100 % RH. Output: 0~1V or 0~5V.	<u>Documentation</u> - Webpage - Brochure

	Symmetron BARON	Calibrated barometric pressure sensor. Range: 150 ... 1150 mbar. Output: 0~2.5V or 0~5V.	<u>Documentation</u> - Webpage - Brochure
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Pyranometers









	Apogee SP-110	Voltage output pyranometer: 0~350mV. No signal amplification is needed with Stylitis data loggers.	<u>Documentation</u> - Webpage - Brochure
	Soluzione Solare Litemeter Current	4~20mA output pyranometer	<u>Documentation</u> - Webpage - Brochure
	LiCor LI-200SZ	Low voltage output pyranometer: 0~20mV. Signal amplification may be needed, for better accuracy, via the corresponding <i>Symmetron</i> converters .	<u>Documentation</u> - Webpage - Brochure



ABB DMTME-I-485 MODBUS RTU energy/power 3-phase multimeter

	Energy/power 3-phase multimeter, for inverter energy production monitoring. Measurements: AC voltage, current, power factor and active, reactive and apparent power and energy of a 3 phase line. Min, max and average values per 15 min. LCD screen display and MODBUS RTU serial communication.	<u>Documentation</u> - Webpage - Brochure
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1-phase and 3-phase pulsed Active Energy meters

	Vendor	Product	Input	Phases	Documentation	
	ABB	C11	Direct-9kW	1	Webpage	Brochure
	Revalco	1RCM1	Direct-6kW	1	Webpage	Brochure
	Revalco	1RCM263	Direct-63A	1	Webpage	Brochure
	ABB	ODIN4165	Direct-65A	3	Webpage	Brochure
	ABB	ODIN4110	Via CTs	3	Webpage	Brochure


Magnelab Current Transformers

	Product	FS MEASURING RANGES	OUTPUT	Documentation	
	SCT-400	5A, 25A, 50A full scale	0.333V full scale	Webpage	Brochure
	SCT-750	100A, 200A, 400A, 600A full scale	0.333V full scale	Webpage	Brochure

Symmetron Tiltometer


	Sensor which measures elevation and azimuth angles. Suitable for measuring the met mast's tilt or the solar tracker movement.	<u>Documentation</u> - Webpage - Brochure - User Manual
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NRG Rain Gauge rain height sensor.


	<p>Tipping bucket rain gauge. Reed Switch Output</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
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C. MODEMS


Symmetron Sym-o-net GSM/GPRS modem

	<p>GPRS modem, enabling GPRS communication with any serial device (along with Stylitis-41/101 data loggers) via a simple low-cost dynamic IP SIM card. Static IP connections and GSM data calls are also available. Encrypted data emails from loggers at least once a day are also available. Multiple Sym-o-nets around the globe may be configured as a virtual wireless RS-485 network via GPRS</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - User Guide - Presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - SymonetCOM - Opton 4
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Sierra Wireless FASTRACK XTEND GSM/GPRS modem


	<p>GSM/GPRS Modem 850/900/1800/1900 MHz. Both RS-232 and USB communication available. For USB connections, download the USB drivers and the Java Runtime Environment (JRE). Regardless if your windows are 32 or 64-bit, download the Windows x86 Offline one (32-bit)</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Fastrack Xtend USB Driver - Java Runtime Environment (JRE)
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Adeunis ARF53 Radio modem


	<p>500mW radio modem RS232/RS485, European version. Does not use the GSM network (no SIM card required). Wireless bidirectional data transmission up to 6km. Create a measuring network to communicate via one PC modem, with multiple logger modems.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure - Connection Guide
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D. OTHER SOFTWARE


CRES WindRose wind data analysis software

	<p>WindRose is a software tool, Add-In to the Microsoft Excel, dedicated to the analysis of wind characteristics (speed, direction, turbulence, temperature). Data analysis complies with the requirements imposed by the IEC and MEASNET standards.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Presentation 	<p><u>Free software</u></p> <ul style="list-style-type: none"> - Full version - 30-day trial
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Symmetron Diameson Gateway server

	<p>Server software which allows users connect to Symmetron data loggers and Sym-o-net modems via the GPRS network, via dynamic IP SIM cards. Use your own Diameson or Symmetron's Diameson as a service.</p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> - Webpage - Brochure
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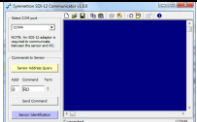
Symmetron Emmetron database software

	Software which consolidates resources, events and measurement data from Stylitis dataloggers into one integrated environment. Includes built-in query and report generators.	<u>Documentation</u> - Webpage - Presentation
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Symmetron Stylitis OPC Server


	Display real-time data from a Stylitis data logger to any SCADA, HMI or custom software package which adheres to the principles of an OPC client. Connect to the data logger via RS-232, RS-485, Ethernet	<u>Documentation</u> - Webpage	<u>Free software</u> Full version 15-day trial
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Symmetron SDI12 Communicator


	Free software for communication with SDI-12 devices via PC. Send SDI-12 commands via a COM port.	<u>Free software</u> - SDI-12 Communicator
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E. ACCESSORIES


Symmetron VeriVane, an instrument for calibration and operation verification of wind vanes

	An instrument for quick and easy testing, verification and calibration of Wind Vanes, which rotates the vane via a step motor, and measures vane output in every position. Self-verification of the instrument can also be performed. Full calibration can also be performed, ie calculation of the vane's dead band and of correction factors (Slope and Offset) to be applied.	<u>Documentation</u> - Webpage - Brochure - Manual	<u>Free software</u> - VeriVane v2.1.2.2 - USB Windows Driver (Executable) - USB Windows Driver (CD-ROM)
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Symmetron TROPOS Series converters: anemometer signal to voltage or current

	These converters receive as input a <i>low-level AC</i> (AC >80mV) or a <i>reed switch anemometer output signal</i> . Linear conversion of frequency ranges: 0~40Hz to: 0~10V, 0~2.5V, 0~5V, 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Symmetron WITOC100 frequency to current converter

	Frequency to current converter/transmitter. Converts 0~100Hz to 4~20mA.	<u>Documentation</u> - Webpage - Brochure
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Symmetron TROPOS-5V-C converter: wind vane voltage signal to current

	This converter receives as input a <i>voltage output signal</i> of a wind vane , with reference voltage 5V . Linear conversion of 0~5V to 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Symmetron VOTOC3 voltage to current converter

	Voltage-to-current converter/transmitter. Converts 0~4.5VDC or 0~2VDC to 4~20mA	<u>Documentation</u> - Webpage - Brochure
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Symmetron **TROPOS Series** converters: **pyranometer signal to voltage or current**

	These converters receive as input a <i>low voltage pyranometer output signal</i> (0~20mV) and converts it linearly to 0~2.5V, 0~5V (amplification) or to 4~20mA.	<u>Documentation</u> - Webpage - Brochure
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JUMO dTRANS PT100 converters

	These converters receive as input a <i>voltage PT100 output signal</i> and converts it linearly to 0~10V (amplification) or to 4~20mA	<u>Documentation</u> - 0~10V converters Webpage - 4~20mA converters Webpage - dTRANS converters Brochure
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Symmetron Apeicon web server.

	External web server for Stylitis data loggers. It allows easy creation of custom web pages, complete with customer photos, logos and data from one or more data loggers. Connect up to 2 data loggers to Apeicon's serial ports and as many data loggers you wish in Apeicon's LAN.	<u>Documentation</u> - Webpage - Brochure
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Miscellaneous measurement accessories

Solar panels: 12V/20W, 12V/10W, 12V/5W. Battery charge controller: 12V/6A. Lead acid batteries: 12V/7.2Ah, 12V/12Ah. Antennas: Magnetic base, directional. LiYCY cables, etc	<u>Documentation</u> - Webpage
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CONTACT INFORMATION



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