IO LOG

DATA ACQUISITION SYSTEM

GENERAL DESCRIPTION

IOlog includes a wide range of input/output modules and isolated serial converters/adapters which are available in three different versions: “Compact” (SS3000 series), “Webswerver” (SS8000 series) and “Industrial (SS10000 series). All i/o modules ensure a high accuracy and a stable measurement over time and with changes in temperature. A dual Watch-Dog (hardware and software) looks after the proper operation of the CPU and sets outputs to safety values in case of communication failure. Signalling leds allow an immediate diagnosis of device operation. The full galvanic isolation ensures a good protection against interference present in industrial environments. Depending on the version, i/o modules have a RS485 interface with a Modbus RTU/ASCII protocol or an Ethernet interface with a Modbus TCP protocol. By linking several modules (via a RS485 or Ethernet bus) to a PC running Winlog Pro SCADA software, you can easily build a reliable and convenient Data Acquisition System for both industrial and home applications..

MAIN FEATURES

- DIGITAL AND ANALOG I/O MODULES
- SERIAL ADAPTERS AND CONVERTERS
- ACCURATE AND STEADY MEASUREMENT
- DUAL WATCHDOG HARDWARE / SOFTWARE
- FULL ELECTRICAL LINES ISOLATION
- AVAILABLE IN THREE DIFFERENT VERSIONS
- MODBUS ASCII - RTU - TCP PROTOCOLS
- WINLOG PRO SCADA SOFTWARE

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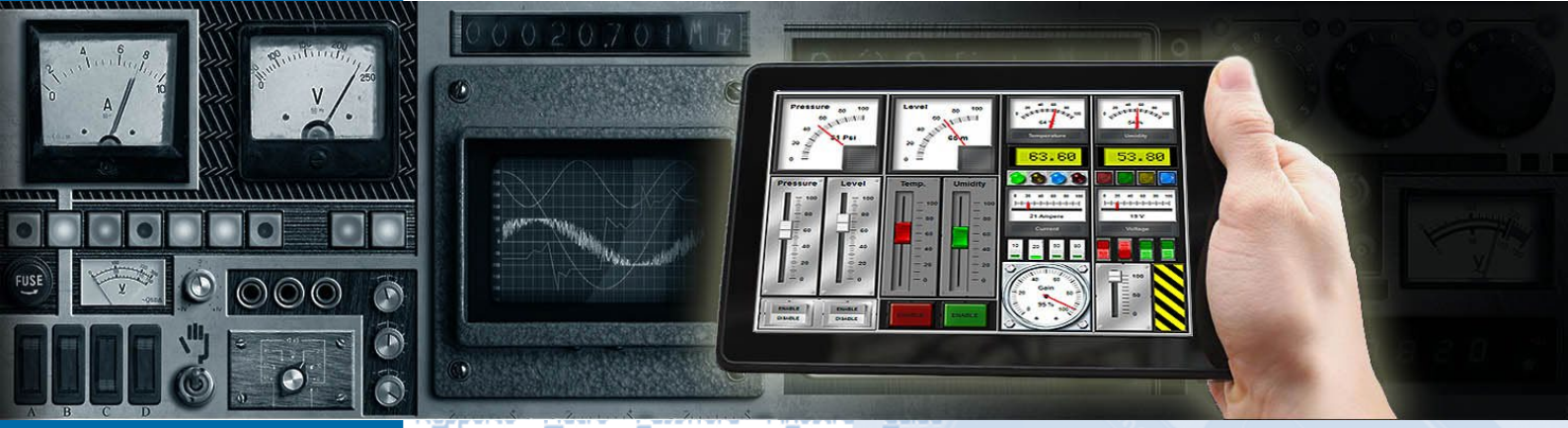

SS 3000

Compact Modbus RTU I/O Modules

SS3000 SERIES

SS3000 includes a series of data acquisition modules with a RS485 interface and a Modbus RTU/ASCII protocol, featuring a compact format which makes them suitable for DIN rail mounting inside small electrical cabinets. All devices ensure a high accuracy and a stable measurement over time and with changes in temperature. A dual Watch-Dog (hardware and software) looks after the proper operation of the CPU and sets outputs to safety values in case of communication failure. Device configuration is provided via software. Signalling leds allow an immediate diagnosis of device operation. Electrical connections are available via plug-in screw terminals. The full galvanic isolation ensures a good protection against interference present in industrial environments.

COMMON FEATURES

Communication protocol	- ModBus RTU - ModBus ASCII - ModBus TCP (using SS3580 MBTCP converter)
Data transmission (asynchronous serial)	Maximum Baud Rate 115,2 Kbps Maximum distance 1,2 Km
Insulation voltage	1500 Vca 50 Hz, 1 min. (Input / Output / RS485 / Supply)
EMC	Immunity EN 61000-6-2 Emission EN 61000-6-4
Power Supply	Supply voltage 20 .. 30 Vcc Current consumption max 45 mA @ 24 Vcc Polarity inversion protection 60 Vcc max
Temperature & Umidity	Operating temperature -10°C .. +60°C Storage temperature -40°C .. +85°C Humidity (non condensing) 0 .. 90 %
Housing	Material Self-extinguishing plastic Mounting EN-50022 DIN rail Weight about 150 g.

MODEL	DESCRIPTION
SS 3014	Analog module with 4 RTD inputs, with 3-way galvanic isolation
SS 3015	Analog module with 4 voltage or current inputs, with 3-way galvanic isolation
SS 3016	Analog module with 4 thermocouple inputs, with 3-way galvanic isolation
SS 3017	Analog module with 8 voltage or current inputs, with 3-way galvanic isolation
SS 3018	Analog module with 8 thermocouple inputs, with 3-way galvanic isolation
SS 3024	Analog module with 4 voltage or current outputs, with 3-way galvanic isolation
SS 3130	Digital module with 4 digital inputs and 4 relay outputs, with 3-way galvanic
SS 3148	Digital module with 12 digital inputs, with 3-way galvanic isolation
SS 3188	Digital module with 8 digital inputs and 8 open-collector outputs, with 3-way galvanic isolation
SS 3580 SERIAL	SERIAL Converter from RS232 to RS-485/RS-422, with 3-way galvanic isolation
SS 3580 USB	USB Converter from USB to RS-485/RS-422, with 3-way galvanic isolation
SS 3580 MBTCP	Converter from Modbus TCP Ethernet to Modbus RTU RS485, with 3-way galvanic isolation

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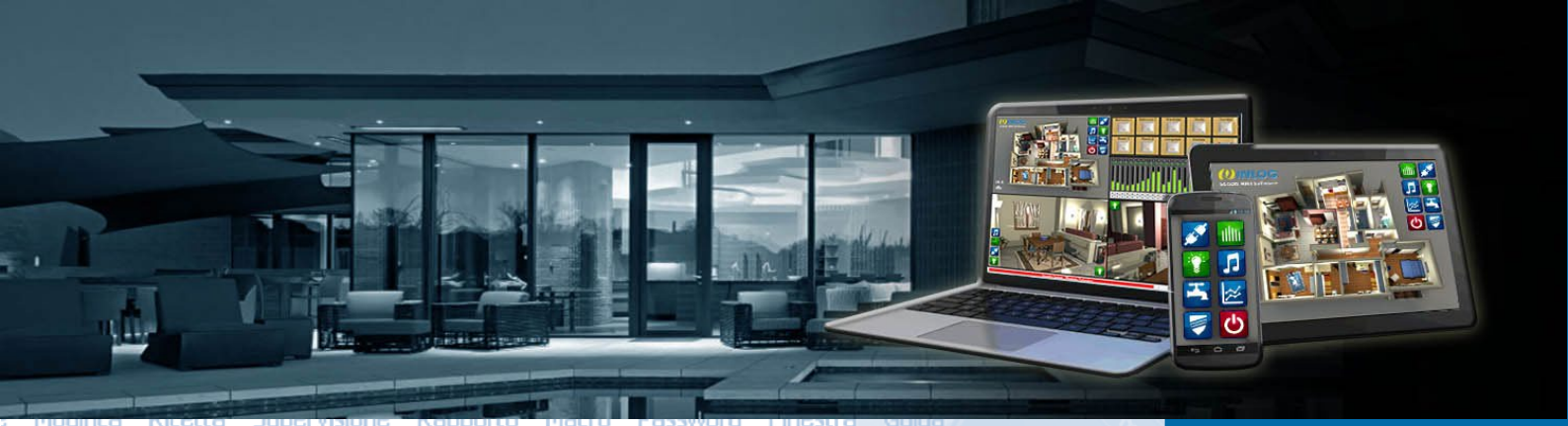

SS 8000

Webserver Modbus TCP I/O Modules

SS8000 SERIES

SS8000 includes a series of data acquisition modules, suited for DIN rail mounting, which provide an Ethernet interface with a Modbus RTU/ASCII protocol and an integrated Webserver support. All devices ensure a high accuracy and a stable measurement over time and with changes in temperature. A dual Watch-Dog (hardware and software) looks after the proper operation of the CPU and sets outputs to safety values in case of communication failure. The integrated Webserver support allows remotely monitoring of variables status and remotely access to main programming parameters. Signalling leds allow an immediate diagnosis of device operation. The Ethernet network is connected via the RJ45 connector; the electrical signals are connected via plug-in screw terminals. The full galvanic isolation ensures a good protection against interference present in industrial environments.

COMMON FEATURES

Communication protocol	ModBus TCP
Network interface	Ethernet 10/100Base-T
Insulation voltage	1500 Vca 50 Hz, 1 min. (Input / Output / RS485 / Supply)
EMC	Immunity EN 61000-6-2 Emission EN 61000-6-4
Power Supply	Supply voltage 20 .. 30 Vcc Current consumption max 60 mA @ 24 Vcc Polarity inversion protection 60 Vcc max
Temperature & Umidity	Operating temperature -10°C .. +60°C Storage temperature -40°C .. +85°C Humidity (non condensing) 0 .. 90 %
Housing	Material Self-extinguishing plastic Mounting EN-50022 DIN rail Weight about 160 g.

MODEL	DESCRIPTION
SS 8014	Analog module with 4 RTD inputs, with 3-way galvanic isolation
SS 8015	Analog module with 4 voltage and 4 current inputs, with 3-way galvanic isolation
SS 8016	Analog module with 4 thermocouple inputs, with 3-way galvanic isolation
SS 8017	Analog module with 8 voltage or current inputs, with 3-way galvanic isolation
SS 8018	Analog module with 8 thermocouple inputs, with 3-way galvanic isolation
SS 8024	Analog module with 4 voltage or current outputs, with 3-way galvanic isolation
SS 8130	Digital module with 8 digital inputs and 4 relay outputs, with 3-way galvanic
SS 8148	Digital module with 16 digital inputs, with 3-way galvanic isolation
SS 8188	Digital module with 8 digital inputs and 8 open-collector outputs, with 3-way galvanic isolation
SS 8580	Converter from Modbus TCP Ethernet to Modbus RTU RS485, with 3-way galvanic isolation

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SS 10000

Industrial Modbus RTU I/O Modules

SS10000 SERIES

SS10000 includes a series of data acquisition modules with a RS485 interface and a Modbus RTU/ASCII protocol, featuring a low-profile format which makes them suitable for DIN rail mounting inside industrial electrical cabinets. All devices ensure a high accuracy and a stable measurement over time and with changes in temperature. A dual Watch-Dog (hardware and software) looks after the proper operation of the CPU and sets outputs to safety values in case of communication failure. Device configuration is provided via software. Signalling leds allow an immediate diagnosis of device operation. Electrical connections are available via plug-in screw terminals. The full galvanic isolation ensures a good protection against interference present in industrial environments.

COMMON FEATURES

Communication protocol	- ModBus RTU - ModBus ASCII - ModBus TCP (using SS10580 converter)
Data transmission (asynchronous serial)	Maximum Baud Rate 115,2 Kbps Maximum distance 1,2 Km
Insulation voltage	1500 Vca 50 Hz, 1 min. (Input / Output / RS485 / Supply)
EMC	Immunity EN 61000-6-2 Emission EN 61000-6-4
Power Supply	Supply voltage 10 .. 30 Vcc Current consumption max 45 mA @ 24 Vcc Polarity inversion protection 60 Vcc max
Temperature & Umidity	Operating temperature -10°C .. +60°C Storage temperature -40°C .. +85°C Humidity (non condensing) 0 .. 90 %
Housing	Material Self-extinguishing plastic Mounting EN-50022 DIN rail Weight about 200 g.

MODEL	DESCRIPTION
SS 10014	Analog module with 4 RTD inputs, with 3-way galvanic isolation
SS 10015	Analog module with 4 voltage e 4 current inputs, with 3-way galvanic isolation
SS 10016	Analog module with 4 thermocouple inputs, with 3-way galvanic isolation
SS 10017	Analog module with 8 voltage or current inputs, with 3-way galvanic isolation
SS 10018	Analog module with 8 thermocouple inputs, with 3-way galvanic isolation
SS 10130	Digital module with 8 digital inputs and 4 relay outputs, with 3-way galvanic
SS 10148	Digital module with 16 digital inputs, with 3-way galvanic isolation
SS 10188	Digital module with 8 digital inputs and 8 open-collector outputs, with 3-way galvanic isolation
SS 10580	Converter from Modbus TCP Ethernet to Modbus RTU RS485, with 3-way galvanic isolation

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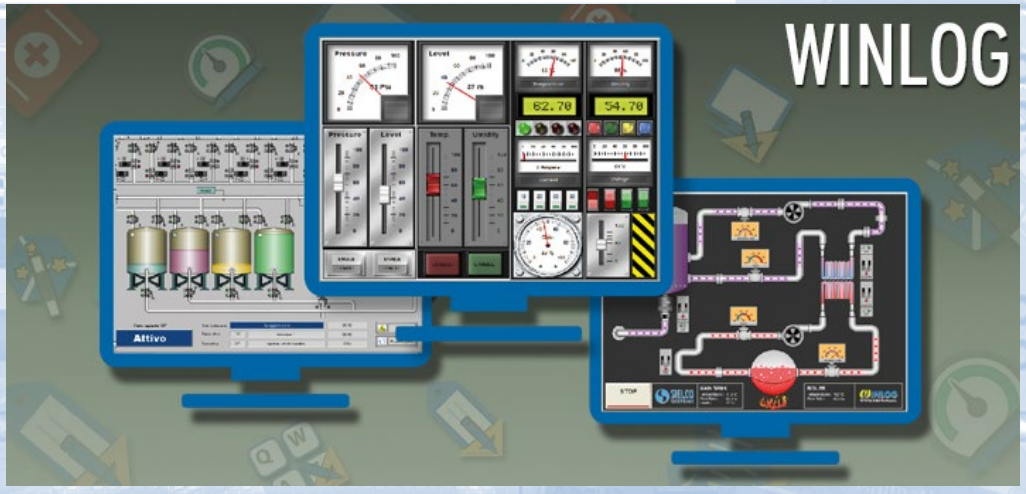
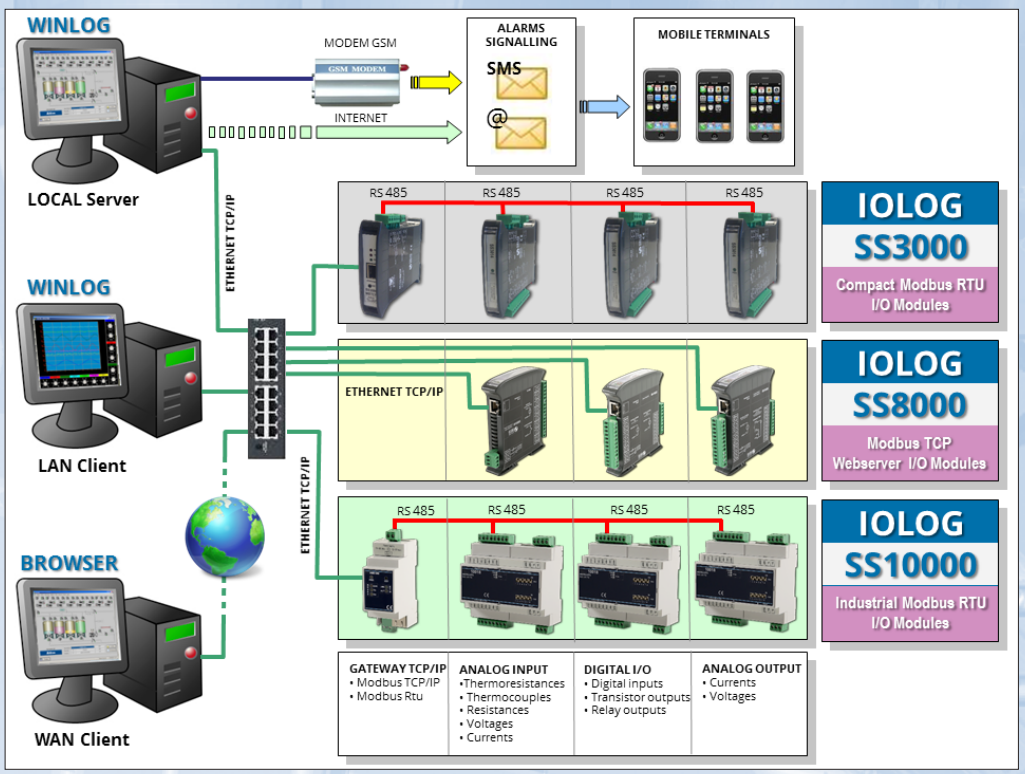


DATA ACQUISITION SOFTWARE

By linking one or more I/O modules, via a RS485 or Ethernet bus, to a PC running Winlog Pro SCADA software, you can quickly and easily build a modular, reliable and convenient Data Acquisition System. An integrated development environment provides a set of tools and graphic libraries for the easy and intuitive creation of multi-language applications. Application Builder is the powerful tool that allows you to automatically create a Data Acquisition software application, by simply taking up from a library and putting together the software objects relating to the different IOlog modules. In addition to Modbus addresses, objects may include supervisory and configuration templates and a list of events and alarms with their management procedures. You can define objects using the Multilanguage option, in order to allow the operator to select the desired language in runtime operation. "Data Acquisition Software" records the data read from I/O modules and makes them available in form of graphical trends, list of historical information or reports (e.g. quality reports). History files in CSV format and ODBC support provide an interface to the most common Windows applications (Excel, SQL, etc.). Winlog Pro makes it possible to set up distributed Client/Server architectures on Intranet/Internet networks or to create web applications accessible from Internet Clients with a simple browser.



WINLOG

SCADA HMI SOFTWARE

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