

PRODUCT OVERVIEW



SENECA

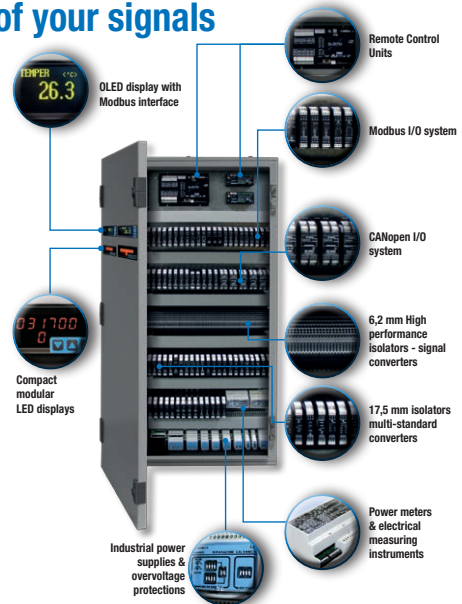
COMPANY



With over **25 years** manufacturing in the industrial automation field, **SENECA** has grown to be a major force in the signal interfacing. Our products lines, **designed** and developed in **Italy**, are compatible and open towards the more widespread technological standard. Our **innovative product** lines, professional approach and worldwide network of trained distributors guarantee the most elegant solutions to all your process interfacing and data acquisition challenges.

PRODUCTS

SENECA takes care of your signals



QUALITY



SENECA produces own products according to the total **quality** criterias. Our company system is **ISO 9001** certified since 1997. The products are **UL UR CSA** approved for North American market and satisfies **RINA** requirements for naval applications. The safety standard, electromagnetic compatibility and electric protection complies with **CE, IEC, EN norms**. The communication software interfaces are developed according the international recognized standard (i.e IEC 61131, ModBUS RTU / TCP, IEC 870, CanOPEN, PPP, SMTP, HTML, OPC Server).

TECHNOLOGIES



The **production** cycles and internal control have processed through the best modern **SMT** (Surface Mounting Technology) & **PTH** (Pin Through Hole) lines. The production capacity is thousands components/hours and this allows to combine high speed, flexibility, reduced **MTBF** and time-to-market. The productive process is fully complies to the environmental and eco-compatible directives: **RAEE, ROHS** and **REACH**. At the end of the cycle all products are strictly tested through automatic systems generating finally single testing reports.

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MYALARM2

GSM/GPRS terminal, datalogger, alarms and telecontrol unit



SALES INFORMATION

ORDER CODE	OPTION	DESCRIPTION
MY2B		GSM/GPRS Datalogger with Alarm Management
MY2G		GSM/GPRS Datalogger with GPS Position Control
MY2S		GSM/GPRS Datalogger with Voice Alarms and DTMF Tones
SPST Relay Board	0	No
	-R	Yes
	0	Standard Communication
	-M	Clamps connection
Colors	-B	Blue
	-G	Grey

Accessories: (1) A-GSM (GSM dual band external antenna), (2) A-GSM-DIR-5M (GSM/UMTS Directive Antenna), (3) A-GSM-OMNIDIR (GSM-UMTS WiFi omnidirective antenna), (4) High performance Quadband GSM antenna, (5) A-GPS external antenna, (6) FDO1 (Pulse counter photodetector), (7) MY2-KITIP66 (IP66 ABS Kit for field applications)

APPLICATION CASES

AUTOMATIC GATES CONTROL



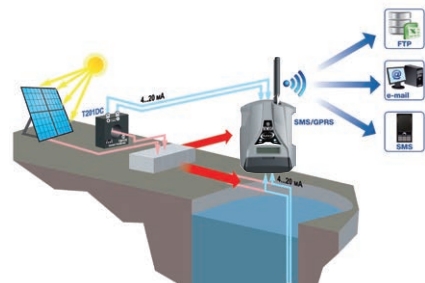
WATER PLANT MONITORING



BOILER & HVAC REMOTE CONTROL



PLANTS TELECONTROL



GSM/GPRS DEVICES



Z-GPRS2 - GSM/GPRS datalogger with built-in I/Os e telecontrol functions

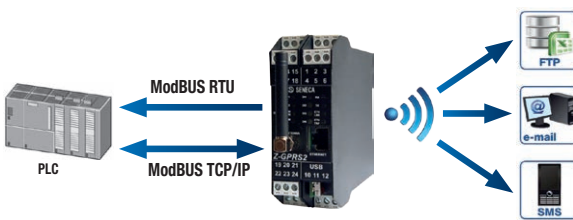


SALES INFORMATION

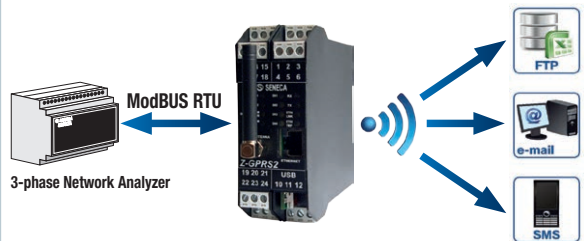
ORDER CODE	DESCRIPTION
Z-MINI-RTU	GSM/GPRS telecontrol device, with built-in I/Os, Straton
Z-GPRS2	GSM/GPRS datalogger with built-in I/Os e telecontrol functions
Z-MODEM	Industrial GSM - GPRS Quadband Modem
Z-RTU-1-GSM	Remote Control Unit with built-in I/Os + GSM/GPRS module, full I/O
M-RTU-GP	GSM/GPRS battery powered compact telemetry unit
M-RTU-PC	GSM/GPRS compact telemetry unit for cathodic protection

APPLICATION CASES

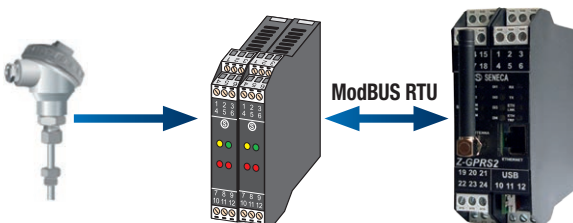
GSM/GPRS REMOTE CONTROLLER



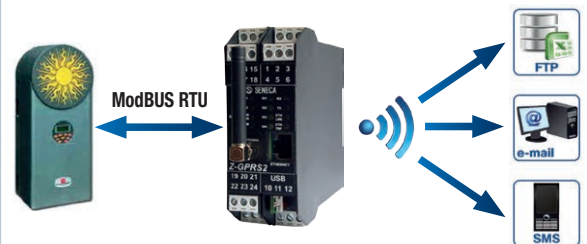
POWER CONSUMPTION MONITORING



WIRELESS DATA ACQUISITION



CONTROL OF PHOTOVOLTAIC INVERTERS



MODBUS I/O SYSTEMS



S401

ModBUS RTU indicator with OLED 2,7" display



Z-8AI

8-CH Analog Input ModBUS RTU module



SALES INFORMATION

ORDER CODE	DESCRIPTION
Z-SG	Strain gauge module / Analogue out + ModBUS RTU
Z-4DI-2AI-2DO	Module with 2 AI, 2 DO, 4 DI, ModBUS RTU/ModBUS TCP-IP
Z-D-IN	5 CH DI module / RS485 ModBUS RTU
Z-D-OUT	5 CH DO Relay module / RS485 ModBUS RTU
Z-10-D-IN	10 CH DI module / RS485 ModBUS RTU
ZC-24DI	24 CH DI module / CANopen-RS485 ModBUS RTU
ZC-24DO	24 CH DO module / CANopen-RS485 ModBUS RTU
ZC-16DI-8DO	16 CH DI / 8 CH DO module / CANopen-RS485 ModBUS RTU
Z-10-D-OUT	10 CH DO module / RS485 ModBUS RTU
Z-D-10	5 CH DI / 2 CH DO module / RS485 ModBUS RTU
Z-DAQ-PID	1 CH AI Universal / RS485 ModBUS RTU with PID regulation
Z-4AI	4 CH AI module / RS485 ModBUS RTU
Z-8AI	8 CH AI module / RS485 ModBUS RTU
Z-3AO	3 CH AO module / RS485 ModBUS RTU
Z-4RTD-2	4 CH RTD input module / RS485 ModBUS RTU
Z-4TC	4 CH TC input module / RS485 ModBUS RTU
Z-8TC	8 CH TC input module / RS485 ModBUS RTU
Z203-1	Single Phase power 500 AC- 5A / Analogue out + ModBUS RTU
Z204	AC/DC voltage to DC current/ voltage isolator/converter + ModBUS RTU
DR-2	Acquisition&recording softw. for Z-PC system 2 channels
DR-4	Acquisition&recording softw. for Z-PC system 4 channels
DR-8	Acquisition&recording softw. for Z-PC system 8 channels
DR-16	Acquisition&recording softw. for Z-PC system 16 channels
DR-32	Acquisition&recording softw. for Z-PC system 32 channels
DR-64	Acquisition&recording softw. for Z-PC system 64 channels
S401-L	Modbus RTU indicator with OLED 2,7" display

TOP PRODUCTS

Z-SG

1-CH Load Cell Input ModBUS RTU module



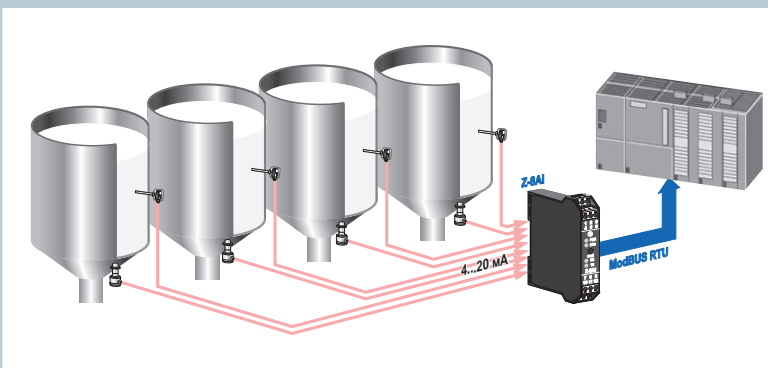
Z-4DI-2AI-2DO

4 -CH Digital Input/ 2 -CH Analogue Input, 2 -CH Digital Output, Modbus RTU module



APPLICATION CASES

TANK MONITORING SYSTEM



CANOPEN I/O SYSTEMS



ZC-24DI

24-CH digital input
CANopen / ModBUS



ZC-24DO

24-CH digital output
CANopen / ModBUS



SALES INFORMATION

ORDER CODE	DESCRIPTION
ZC-24DI	24 CH digital input CANopen / ModBUS module
ZC-24DO	24 CH digital output CANopen / ModBUS module
ZC-16DI-8DO	16 CH digital input / 8 CH digital output CANopen / ModBUS module
ZC-8AI	8 CH analog input CANopen module
ZC-3AO	3 CH analog output CANopen module
ZC-4RTD	4 CH RTD (Pt100, Ni100, Pt500, Pt1000) input CANopen module
ZC-8TC	8 CH Thermocouple (J,K,E,N,S,R,B,T) CANopen module
ZC-SG	1 CH strain gauge CANopen module

TOP PRODUCTS

ZC-8AI

8-CH analog input (mA, V)
CANopen module



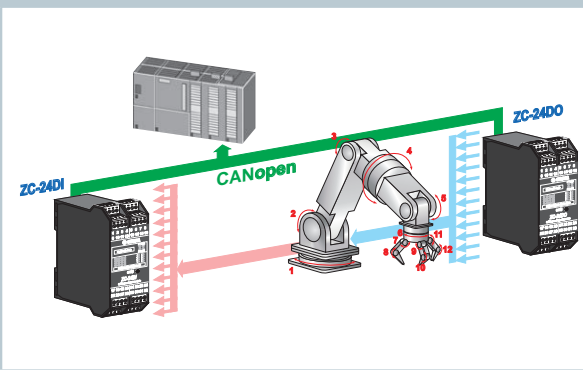
ZC-3AO

3-CH analog output (mA, V)
CANopen module

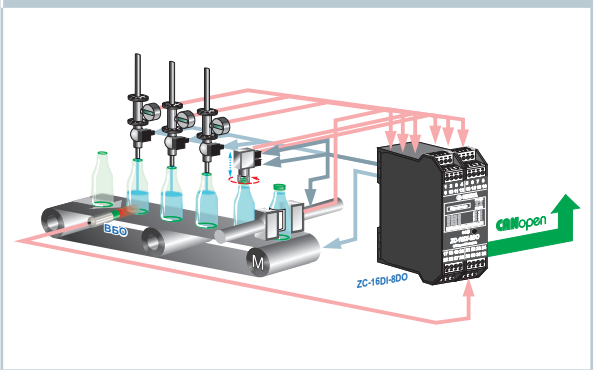


APPLICATION CASES

HANDLING SYSTEM



AUTOMATIC BOTTLING SYSTEM



TCP-IP I/O SYSTEMS

ZE-2AI

2-CH Analogue input Modbus RTU
- Modbus TCP-IP module



ZE-4DI-2AI-2DO

4 CH Digital Input/ 2 CH
Analogue Input, 2 CH Digital
Output, Modbus RTU



SALES INFORMATION

ORDER CODE	DESCRIPTION
ZE-2AI	Module with 2 analog inputs, ModBUS RTU / ModBUS TCP-IP
ZE-4DI-2AI-2DO	Module with 2 AI, 2 DO, 4 DI, ModBUS RTU / ModBUS TCP-IP
Z-BRIDGE2	Bridge ModBUS TCP-IP / ModBUS RTU with dual serial port
Z-LOGGER	Datalogger, alarm module with built-in I/Os

TOP
PRODUCTS

Z-LOGGER

Datalogger, alarm module
with built-in I/Os



Z-BRIDGE2

Bridge ModBUS TCP-IP
ModBUS RTU with dual serial port



COMPATIBILITY

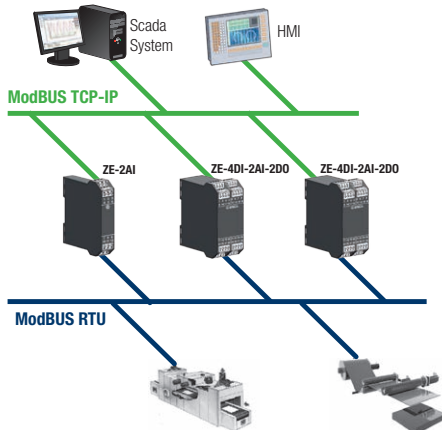


WEB SERVER CONFIGURATION

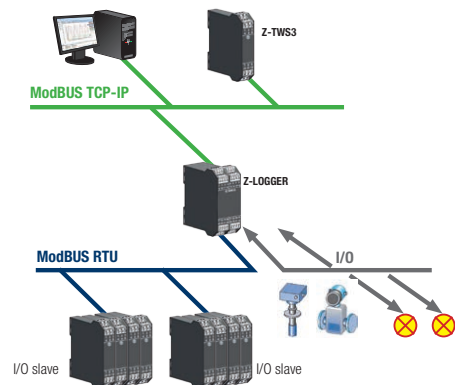


APPLICATION CASES

MODBUS TCP-IP RETRANSMISSION



ALARM MANAGEMENT & DATALOGGING



COMMUNICATION INTERFACES



K107A

RS485 ↔ RS485 Serial Isolator / Amplifier



SERIAL

S107USB

USB ↔ RS485 serial converter (desk version), drivers and cable included



USB

Z-GATEWAY

Gateway Modbus RTU ↔ Modbus TCP-IP, dual RS485 port



TCP-IP



Z107FO

Fiber Optic serial (RS232/RS485) converter



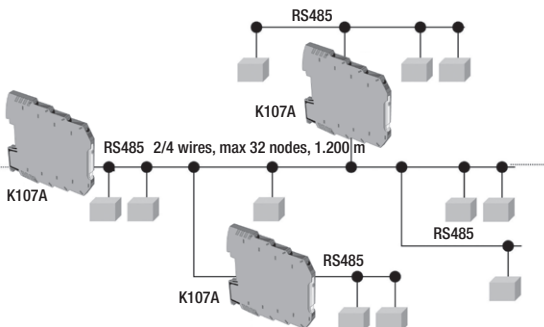
OPTIC

SALES INFORMATION

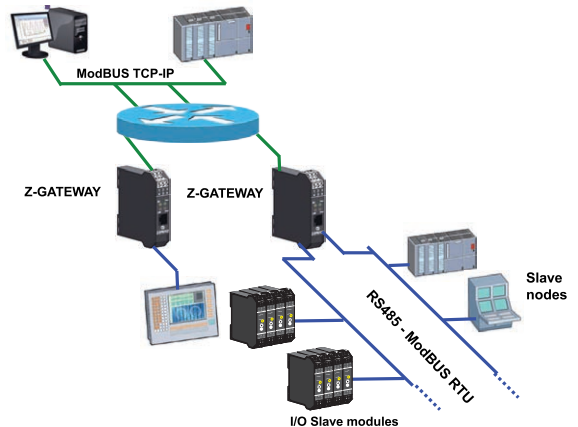
ORDER CODE	DESCRIPTION
K107A	RS485 ↔ RS485 serial amplifier/Isolator
K107B	RS232 ↔ RS485 serial converter/Isolator
Z107	RS232 ↔ RS485/422 converter / Isolator
S107P	RS232 ↔ RS485/422 converter / Isolator
S107USB	USB ↔ RS485 converter / Isolator
K107USB	USB ↔ RS485 converter / Isolator
S117P-1	USB ↔ RS232/TTL/RS485/ converter/Isolator+cable PM001601
Z-GATEWAY	Modbus TCP-IP / Modbus RTU Gateway with double RS485 port
Z-BRIDGE2	ModBUS TCP-IP / ModBUS RTU Bridge with double RS485 port
Z107E	RS232/Ethernet 10-100MB Converter
Z107FO	RS232-RS485 ↔ Fiber Optic interface
ZC-107FO	CANBUS ↔ Fiber Optic interface
S232-SL	Converter RS232 To Fiber Optic - Single Loop
S232-DL	Converter RS232 To Fiber Optic - Double Loop
S485-SL	Converter RS485 To Fiber Optic - Single Loop
S485-DL	Converter RS485 To Fiber Optic - Double Loop

APPLICATION CASES

RS485 SERIAL CONNECTION



MODBUS RTU TO TCP-IP CONVERSION



RADIO DEVICES



Z-LINK1

869 Mhz Radiomodem with RS232/RS485 interface and Mesh Network Capability

Frequency: 869 Mhz
Distance: ~ 400 m
Power: <20 mW



Z-AIR

868-870 Mhz UHF Radiomodem

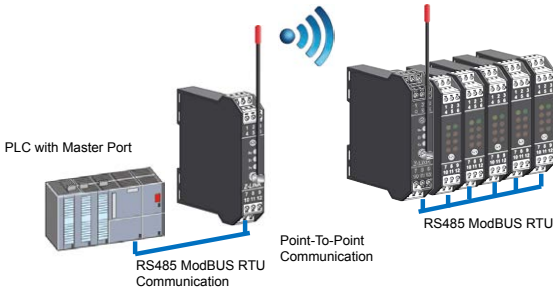
Frequency: 869 Mhz
Distance: ~ 7 km
Power: 25..500 mW

SALES INFORMATION

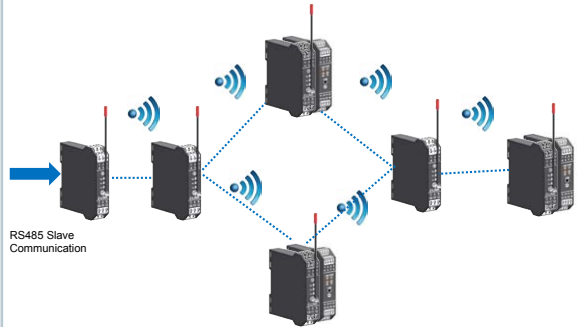
ORDER CODE	DESCRIPTION
Z-LINK1	869 MHz Radiomodem + RS232/RS485 interface and Mesh Network support
Z-AIR	868-870 MHz UHF Radiomodem

APPLICATION CASES

SERIAL NETWORK EXTENSION

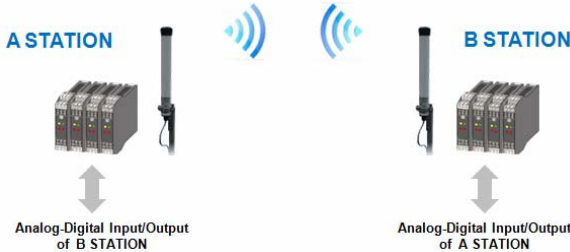


MESH NETWORK SUPPORT



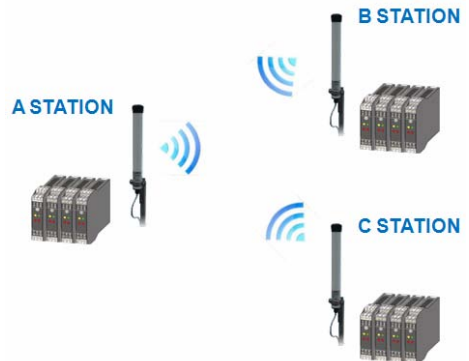
POINT-TO-POINT TRANSMISSION (I/O REPETITION)

Frequency 868 – 870 MHz | Speed 4,8 – 9,6 Kbps | Power 25 – 500 mW



POINT-TO-MULTIPOINT TRANSMISSION (I/O REPETITION)

Frequency 868 – 870 MHz | Speed 4,8 – 9,6 Kbps | Power 25 – 500 mW



SIGNAL CONVERTERS



K109PT

Pt100 to DC Current / Voltage Isolator / Converter



K109S

DC Current / Voltage to DC Current / Voltage Isolator / Converter



Z170REG

DC duplicator / isolator with universal input and 2 output



Z201

AC current to DC isolator / converter

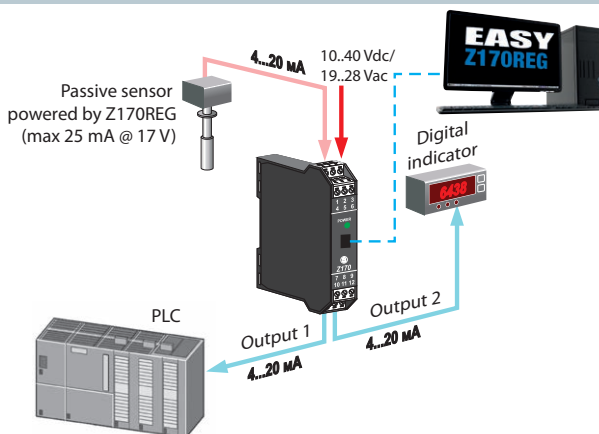


SALES INFORMATION

ORDER CODE	DESCRIPTION
Z109REG2	Universal Isolator/Converter with special functions 9...40 Vdc-19...28 Vac
Z109REG-BP	Universal converter with bipolar mA / V output
Z109UI2	DC Current/Voltage to DC Current/Voltage Isolator/Converter
Z110S/D	Self powered Current solator for 4...20 mA loops -1/2 channel
Z102	Potentiometer to DC Current/Voltage Isolator/Converter
Z201	AC Current(5-10 A)to DC I/V Conv.19...40Vdc - 19...28 Vac
Z202	AC Voltage(500 A)to DC I/V Conv.19...40 Vdc-19...28 Vac
Z202-LP	500 VAC- 540 VDC to 4...20 mA Converter (loop powered) 5...28 Vdc
Z203-1	Single Phase Power 500 VAC- 5A to DC I/V Isolator /Converter
Z-SG	Strain gauge module / Analogue out + ModBUS RTU
Z109PT2	RTD to DC I/V isolator/converter
Z109TC	TC to DC Current/Voltage Isolator/ Converter
Z104	DC I/V frequency isolator/converter
Z111	Frequency to DC Current/Voltage Isolator/Converter
Z170REG	DC duplicator / isolator with universal input and 2 output
Z190	DC Current/Voltage Adder/subtractor
Z112A	Digital contact amplifier 1 channel
Z112D	Digital contact amplifier 2 channels
Z113-1	Trip alarm module with universal analog input
Z113S/D/T	Trip alarm module for mA/V signals - 1/2/3 relay
K109PT	PT100 to DC Current/Voltage Isolator/ Converter
K109PT1000	PT1000 to DC Current/Voltage Converter
K120RTD	Pt100 / Ni100 to 4...20 mA (loop powered)-non isolated
K109TC	TC to DC Current/Voltage Isolator/ Converter-with alarm
K121	Converter with Univ. input, loop powered
K109UI	DC Current/Voltage to DC Current/Voltage Isolator/Converter
K109S	DC Current/Voltage to DC Current/Voltage Converter
K109LV	mV to DC Current/Voltage Converter
K111	Frequency Trip alarm unit
K112	Universal digital Coupler/Isolator

APPLICATION CASES

ANALOG SIGNAL DUPLICATION AND RETRANSMISSION



DIGITAL INDICATORS



S311A

Indicator-Totalizer
with universal analogue input



S311AK

High-precision Indicator
with analog input, 4 digits



S312A

Analog Indicator 4-Digits
Display with 4 relay outputs



S315

Loop powered Indicator
4 digits, 4-20 mA input

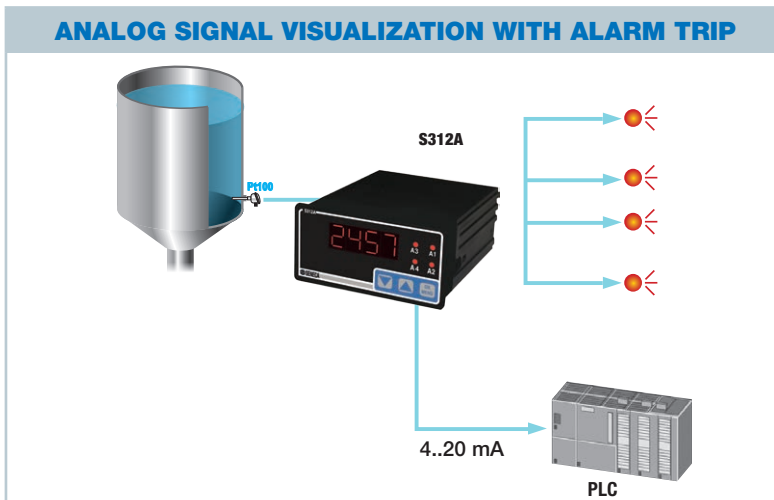


SALES INFORMATION

ORDER CODE	DESCRIPTION
S401-L	Oled display with Modbus interface, 10-40 Vdc, 19-28 Vac
S311A-4-H	Indicator-Totalizer with universal analogue input, 80-265 Vac, 4 digits
S311A-6-H	Indicator-Totalizer with universal analogue input 80-265 Vac, 6 digits
S311A-8-H	Indicator-Totalizer with universal analogue input 80-265 Vac, 8 digits
S311A-11-H	Indicator-Totalizer with universal analogue input 80-265 Vac, 11 digits
S311A-4-L	Indicator-Totalizer with universal analogue input, 10-40 Vdc / 19-28 Vac, 4 digits
S311A-6-L	Indicator-Totalizer with universal analogue input, 10-40 Vdc / 19-28 Vac, 6 digits
S311A-8-L	Indicator-Totalizer with universal analogue input, 10-40 Vdc / 19-28 Vac, 8 digits
S311A-11-L	Indicator-Totalizer with universal analogue input, 10-40 Vdc / 19-28 Vac, 11 digits
S311D-6-H	Frequency / digital Indicator - Totalizer, 80 -265 Vac, 6 digits
S311D-8-H	Frequency / digital Indicator - Totalizer, 80 -265 Vac, 8 digits
S311D-6-L	Frequency / digital Indicator - Totalizer, 10 -40 Vdc/ 19-28 Vac, 6 digits
S311D-8-L	Frequency / digital Indicator - Totalizer, 10 -40 Vdc/ 19-28 Vac, 8 digits
S311AK-4-L	High-precision Indicator with analog input, 4 digits
S311AK-4-L-IP66	High-precision Indicator with analog input, 4 digits, with IP66 protection
S312A	Analog Indicator 4-Digits Display with 4 relay outputs
S315	Loop powered Indicator 4 digits, 4-20 mA input
S315-IP66	Loop powered Indicator 4 digits, 4-20 mA input, with IP66 protection
S21-1-ST	Batch controller with clock, 115-230 Vac
S21-23-ST	Batch controller with clock, 24 Vac/dc
S21EX-1-ST	Batch controller with clock, in EEXd explosion proof case 115-230 Vac

APPLICATION CASES

ANALOG SIGNAL VISUALIZATION WITH ALARM TRIP



CURRENT TRANSFORMERS



T201

AC Current Transducer
(4..20 mA – loop powered)



T201DC

DC Current Transducer
(4..20 mA – loop powered)



SALES INFORMATION

ORDER CODE	DESCRIPTION
T201	AC Current Transducer 5-40 A to 4..20 mA (Loop powered)
T201DC	DC Current Transducer 5-40 A to 4..20 mA (Loop powered)
T201DC100	DC/DC Current Transducer up to 100 A (4..20 mA – loop powered)
T201DCH	AC/DC TRMS Current Transducer, up to 50 A, Hall Effect
T201DCH100	AC/DC TRMS Current Transducer, up to 100 A, Hall Effect
T201DCH300	AC/DC TRMS Current Transducer, up to 300 A, Hall Effect

TOP PRODUCTS

T201DCH

AC/DC TRMS Current Transducer,
(4..20 mA – loop powered)
Hall Effect



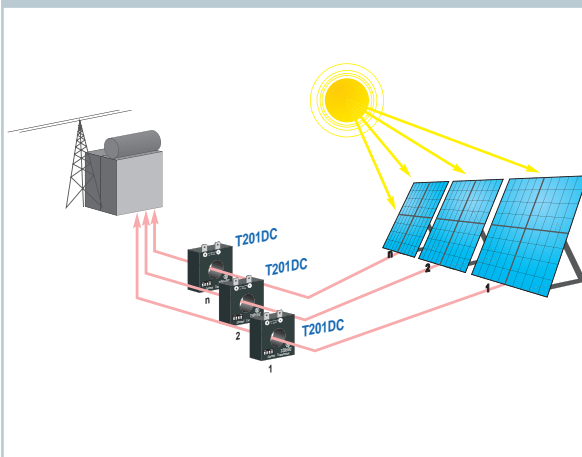
T201DCH300

AC/DC TRMS Current Transducer,
up to 300 A, Hall Effect

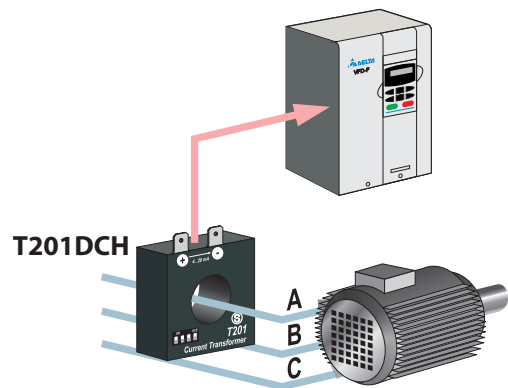


APPLICATION CASES

SOLAR PANEL CURRENT MONITORING



MOTOR CONTROL MONITORING



POWER & ENERGY MANAGEMENT



Z-TWS4

Multi-function web controller
Straton / Linux based



ENERGY MANAGEMENT PROTOCOLS:
IEC 60870-5-101
IEC 60870-5-104
IEC 61850
IEC 61400-25

Z204

AC/DC voltage to DC
current/voltage
isolator/converter



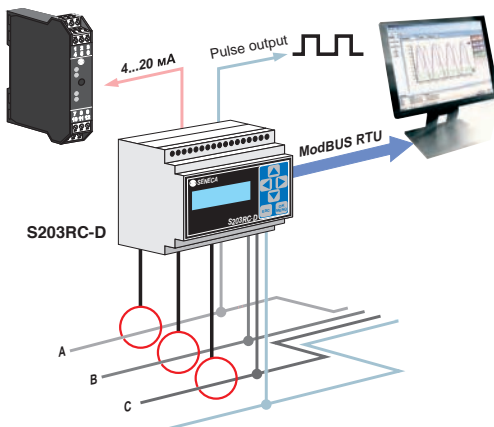
S203RC-D

Three-phase Network
Analyzer for Rogowski's
sensor



APPLICATION CASES

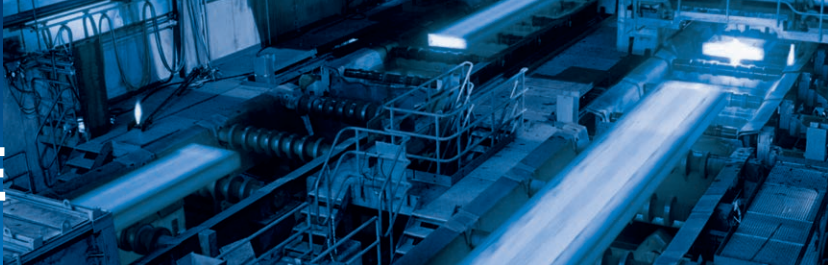
3-PHASE INPUT WITH ROGOWSKI SENSOR



SALES INFORMATION

ORDER CODE	DESCRIPTION
S203RC-D	3-phase Network Analyzer for Rogowski's sensor
RC-V400-100	Rogowski Coil, output 100mV/ kA, 50-60 Hz, Ø 115 mm, cable 2,5 m
S203T	3-phase network analyzer, 100 mA input
S203TA	3-phase Network analyzer to used with max 5 A CTs
S203TA-D	3-phase Network analyzer Up to 500 Vac/5A, with frontal display
Z201	AC Current (5-10 A) to DC I/V Conv.19..40Vdc - 19..28 Vac
Z202	AC Voltage (500 A) to DC I/V Conv.19..40 Vdc-19..28 Vac
Z202-LP	AC / DC voltage to DC isolator / converter, loop powered
Z203-1	AC single phase advanced network analyzer
Z204	AC/DC voltage to DC current/ voltage isolator/converter
T201	AC Current Transf. 5-40 A to 4..20 mA (Loop powered)
T201DC	DC Current Transf. 5-40 A to 4..20 mA (Loop powered)
T201DC100	DC/DC Current Transducer up to 100 A (4..20mA – loop powered)
T201DCH	AC/DC TRMS Current Transducer, up to 50 A, Hall Effect
T201DCH100	AC/DC TRMS Current Transducer, up to 100A, Hall Effect
T201DCH300	AC/DC TRMS Current Transducer, up to 300A, Hall Effect
K109LV	DC Low Voltage to DC Current / Voltage isolator converter
K121	Loop powered isolator / universal converter (mA, V, Ohm, RTD, TC)
Z-GPRS2	GSM/GPRS datalogger with built-in IOs e telecontrol functions
Z-TWS4-L-K	Multi-function web controller Linux + programming kit
Z-TWS4-S-K	Multi-function web controller Straton + programming kit
TEST-3	Voltage / Current simulator meter (handheld)
S400CL	4-20 mA current loop protection
S400HV	230 Vac power line protection
S400LV	35 V power line protection
MY2B-0-0-0-M-G	GSM/GPRS unit, clamps, grey
MY2B-R-0-0-M-G	GSM/GPRS unit, clamps, relay, grey

TEMPERATURE CONVERTERS



K109TC

Thermocouple converter with settable threshold



Z109PT2

RTD to DC current / voltage isolator converter



T121

Isolated loop powered temperature transmitter



Z-4RTD2

4-CH RTD input module / ModBUS RTU



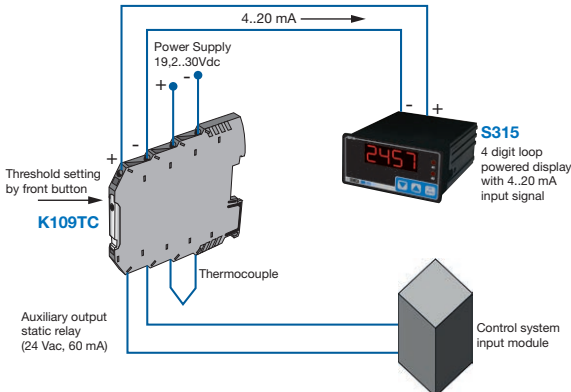
SALES INFORMATION

ORDER CODE	DESCRIPTION
T120	Pt100/Ni100 to 4-20mA out (non-Isolated), B-Head mounting
T121	Universal Input to 4-20mA out (Isolated), B-Head mounting
K109PT	PT100 to DC Current/Voltage Isolator/Converter
K109PT-HPC	PT100 to DC Current/Voltage Isolator/Converter - High precision
K109PT1000	PT1000 to DC Current/Voltage Isolator/Converter
K109TC	TC to DC Current/Voltage Isolator/Converter-with alarm
Z109PT2	RTD (Pt100, Pt1000, Pt500, Ni100) to DC I/V Isolator/Converter
Z109TC	TC to DC Current/Voltage Isolator/Converter
Z109REG2	Universal Isolator/Conv. with special func. 9..40 Vdc-19..28 Vac
Z170REG	Universal converter with 2 analogue Isolated Output
Z-4RTD2	4 CH RTD input module / RS485 ModBUS RTU
Z-4TC	4 CH Thermocouple input module / RS485 ModBUS RTU
Z-8TC	8 CH Thermocouple input module / RS485 ModBUS RTU
ZC-4RTD	4 CH RTD (P100, Ni100, Pt500, Pt1000) input CANopen module
ZC-8TC	8 CH Thermocouple (J,K,E,N,S,R,B,T) CANopen module

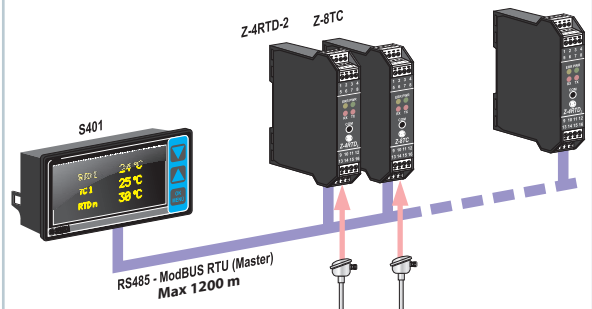
APPLICATION CASES

THERMOCOUPLE CONVERSION / DISPLAYING AND ALARM MANAGEMENT

TC conversion / displaying through 315 alarm management



REMOTE TEMPERATURE MONITORING





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