EDGE DEVICES / INDUSTRIAL IOT SOLUTIONS

IIoT Gateways / Straton Controllers with Energy protocols

	R-PASS-0-2-E	R-PASS-0-4-E	R-PASS-W-2-E	R-PASS-W-4-E
				
	Compact multifunction IIoT gateway / Straton PLC with Energy prot., 2 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC with Energy prot., 4 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC with Energy prot., Wi-Fi, 2 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC with Energy prot., Wi-Fi, 4 Ethernet ports
GENERAL DATA				
Power supply	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac
Power consumption	Max 8 W	Max 8 W	Max 8 W	Max 8 W
Battery / UPS	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module
LED - status indicators	Power supply Serial communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial communication Ethernet communication Wi-Fi communication I/O Status
Isolation	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways
USB Host	Yes	Yes	Yes	Yes
Flash Memory (data)	>= 4 GB	>= 4 GB	>= 4 GB	>= 4 GB
Protection degree	IP20	IP20	IP20	IP20
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C
Storage temperature	-30..+80°C	-30..+80°C	-30..+80°C	-30..+80°C
Humidity	10..90% non condensing	10..90% non condensing	10..90% non condensing	10..90% non condensing
Connections	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x4)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x4)
Built-in I/O	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)
Dimension (wxhxd)	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm
Weight	170 g	170 g	170 g	170 g
Case	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black
Mounting	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted
Approval	CE	CE	CE	CE
COMMUNICATION				
Ethernet ports	Nr.2 Fast Ethernet 10/100Tx ports (1 LAN, 1 WAN) with RJ45 front connector	Nr.4 Fast Ethernet 10/100Tx ports (3 LAN, 1 WAN) with RJ45 front connector	Nr.2 Fast Ethernet 10/100Tx ports (1 LAN, 1 WAN) with RJ45 front connector	Nr.4 Fast Ethernet 10/100Tx ports (3 LAN, 1 WAN) with RJ45 front connector
Serial ports	Nr.1 RS232 / RS485 port on terminals, max baud rate 115kbps Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals, max baud rate 115kbps Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals, max baud rate 115kbps Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals, max baud rate 115kbps Nr.1 RS485 port on terminals , max baud rate 115kbps
USB ports	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port
4G+ / UPS	With optional module	With optional module	With optional module	With optional module
Industrial / IT protocols	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen
IoT protocols	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post
VPN / security protocols	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS
Energy protocols	IEC60870-101 Master / Slave IEC60870-104 Client / Server IEC61850 Client/Server	IEC60870-101 Master / Slave IEC60870-104 Client / Server IEC61850 Client/Server	IEC60870-101 Master / Slave IEC60870-104 Client / Server IEC61850 Client/Server	IEC60870-101 Master / Slave IEC60870-104 Client / Server IEC61850 Client/Server
Wi-Fi	No	No	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2
SETTINGS & ADVANCED FUNCTIONS				
Configuration	Web Server, ZNET4	Web Server, ZNET4	Web Server, ZNET4	Web Server, ZNET4
IEC 61131-3 Control Logic	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3
VPN management software	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX
Management tools	SDD (Seneca Discovery Device)	SDD (Seneca Discovery Device)	SDD (Seneca Discovery Device)	SDD (Seneca Discovery Device)
IoT supports and third-party platforms	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA

R-PASS - Industrial IoT Edge Devices

AUXILIARY MODULE

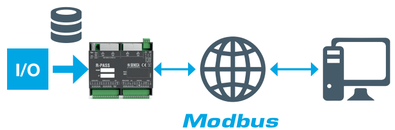
R-COMM is an auxiliary module that interfaces directly with R-PASS modules by providing modem functionality and mini UPS. Available in 3 versions.



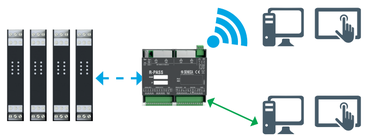
	R-COMM-0-4GWW	R-COMM-B-0	R-COMM-B-4GWW
Runtime backup battery / UPS	-	Please see instruction manual	Please see instruction manual
Operating temperature	-20..+55°C	-20..+55°C	-20..+55°C
Mounting	For DIN rail (IEC EN 60715)	For DIN rail (IEC EN 60715)	For DIN rail (IEC EN 60715)
Modem	4G/LTE Model Global LTE-FDD/TDD/CAT1 UMTS/HSDPA/ HSUPA/HSPA+ GSM/GPRS/EDGE		4G/LTE Model Global LTE-FDD/TDD/CAT1 UMTS/HSDPA/ HSUPA/HSPA+ GSM/GPRS/EDGE
GNSS	GPS, GNSS, GLONASS, BEIDOU, GALILEO, QZSS		GPS, GNSS, GLONASS, BEIDOU, GALILEO, QZSS

APPLICATION SCHEMES

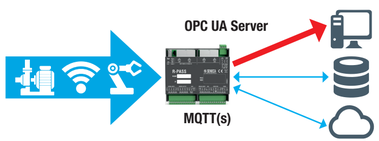
TAG GATEWAY



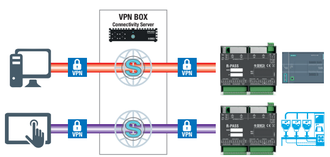
WI-FI GATEWAY



OPC UA / MQTT CONTROL



VPN REMOTE ASSISTANCE



ORDER CODE

Code	Description
R-PASS-0-2-0	Compact multifunction IIoT gateway 2 LAN ports
R-PASS-0-2-E	Compact multifunction IIoT gateway / Straton controller with Energy prot., 2 LAN ports
R-PASS-0-2-S	Compact multifunction IIoT gateway / Straton controller, 2 LAN ports
R-PASS-0-4-0	Compact multifunction IIoT gateway 4 LAN ports
R-PASS-0-4-E	Compact multifunction IIoT gateway / Straton controller with Energy prot., 4 LAN ports
R-PASS-0-4-S	Compact multifunction IIoT gateway / Straton controller, 4 LAN ports

Code	Description
R-PASS-W-2-0	Compact multifunction IIoT gateway, Wi-Fi, 2 LAN ports
R-PASS-W-2-E	Compact multifunction IIoT gateway / Straton controller with prot. Energy, Wi-Fi, 2 LAN ports
R-PASS-W-2-S	Compact multifunction IIoT gateway / Straton controller, Wi-Fi, 2 LAN ports
R-PASS-W-4-0	Compact multifunction IIoT gateway / compact multifunction IIoT, Wi-Fi, 4 LAN ports
R-PASS-W-4-E	Compact multifunction IIoT gateway / Straton controller with Energy prot., Wi-Fi, 4 LAN ports
R-PASS-W-4-S	Compact multifunction IIoT gateway / Straton controller, Wi-Fi, 4 LAN ports

2202077_R-PASS_EN – May 2022

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100% Made & Designed in Italy

R-PASS
Industrial
IoT Edge Devices



SENECA
www.seneca.it

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R-PASS
Industrial IoT Edge Devices



R-PASS represents a family of Industrial IoT Edge solutions. Its models include multipurpose devices with advanced faeatures such as gateway, datalogger, alarm management, route rWi-Fi, logic functions and IEC 61131-3 softPLC.
R-PASS modules offer client/server connectivity solutions for implementation of complex systems with different simultaneous access points to the system or to the single machine. They are also expandable with the R-COMM communication module equipped with 4G LTE modem.
Integrated into the LET'S platform, R-PASS can support connections in Point-To-Point mode for Remote Assistance or Single-LAN mode (Telecontrol). Through the use of IIoT protocols such as MQTT, OPC-UA and http post, R-PASS modules also seamlessly integrate systems for data analysis, business supervision and management, ERP and MES. R-PASS can take advantage of the SSD HMI (Surprirse Smart Display) to manage alarms, send commands, set parameters and display graphics from HTML5 web browsers.

HIGHLIGHTS

- FLEXIBLE AND SPACE-SAVING APPLICATIONS
- I/O HIGH DENSITY
- BUILT-IN NETWORKING
- DAISY CHAIN
- SOFT PLC IEC 61131-3
- DATALOGGER FUNCTION
- WI-FI
- OPC UA
- MQTT
- ADVANCED ROUTING
- IEC 60870/61850 PROTOCOLS
- CLOUD SUPPORT

OPERATING MODE AND CONNECTIVITY

	IIoT Gateways				IIoT Gateways / Straton Controllers				IIoT Gateways / Straton Controllers with Energy protocols			
	R-PASS-0-2-0	R-PASS-0-4-0	R-PASS-W-2-0	R-PASS-W-4-0	R-PASS-0-2-S	R-PASS-0-4-S	R-PASS-W-2-S	R-PASS-W-4-S	R-PASS-0-2-E	R-PASS-0-4-E	R-PASS-W-2-E	R-PASS-W-4-E
OPERATING MODE												
ModBUS / Ethernet Gateway	x	x	x	x	x	x	x	x	x	x	x	x
Gateway with Tags	x	x	x	x	x	x	x	x	x	x	x	x
IIoT/Cloud-based gateway	x	x	x	x	x	x	x	x	x	x	x	x
Alarm Management	x	x	x	x	x	x	x	x	x	x	x	x
Datalogger	x	x	x	x	x	x	x	x	x	x	x	x
Serial Sniffer	x	x	x	x	x	x	x	x	x	x	x	x
Wi-Fi Router			x	x			x	x			x	x
Advanced router with NAT 1:1	x	x	x	x	x	x	x	x	x	x	x	x
Network redundancy	x	x	x	x	x	x	x	x	x	x	x	x
VPN remote assistance	x	x	x	x	x	x	x	x	x	x	x	x
Up to 2000 IF THEN ELSE logic rules	x	x	x	x								
PLC Straton					x	x	x	x	x	x	x	x
IEC 60870/61850									x	x	x	x
CONNECTIVITY												
Max 32 Modbus TCP-IP server connections	x	x	x	x	x	x	x	x	x	x	x	x
Max 25 Modbus TCP-IP clients	x	x	x	x	x	x	x	x	x	x	x	x
Max 2000 variables (tags)	x	x	x	x	x	x	x	x	x	x	x	x
Max 128 ModBUS RTU slave nodes (per serial)	x	x	x	x	x	x	x	x	x	x	x	x

EDGE DEVICES / INDUSTRIAL IOT SOLUTIONS
IIoT Gateways

	R-PASS-0-2-0	R-PASS-0-4-0	R-PASS-W-2-0	R-PASS-W-4-0
				
	Compact multifunction IIoT gateway 2 Ethernet ports	Compact multifunction IIoT gateway 4 Ethernet ports	Compact multifunction IIoT gateway, Wi-Fi, 2 Ethernet ports	Compact multifunction IIoT gateway, Wi-Fi, 4 Ethernet ports
GENERAL DATA				
Power supply	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac
Power consumption	Max 8 W	Max 8 W	Max 8 W	Max 8 W
Battery / UPS	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module
LED - status indicators	Power supply Serial Communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial Communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial Communication Ethernet communication Wi-Fi communication I/O Status	Power supply Serial Communication Ethernet communication Wi-Fi communication I/O Status
Isolation	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways
USB Host	Yes	Yes	Yes	Yes
Flash Memory (data)	>= 4 GB	>= 4 GB	>= 4 GB	>= 4 GB
Protection degree	IP20	IP20	IP20	IP20
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C
Storage temperature	-30..+80°C	-30..+80°C	-30..+80°C	-30..+80°C
Humidity	10..90% non condensing	10..90% non condensing	10..90% non condensing	10..90% non condensing
Connections	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)
Built-in I/O	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)
Dimension (wxhxd)	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm
Weight	170 g	170 g	170 g	170 g
Case	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black
Mounting	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted
Approval	CE	CE	CE	CE
COMMUNICATION				
Ethernet ports	Nr.2 Fast Ethernet 10/100Tx ports (1 LAN, 1 WAN) with RJ45 front connector	Nr.4 Fast Ethernet 10/100Tx ports (3 LAN, 1 WAN) with RJ45 front connector	Nr.2 Fast Ethernet 10/100Tx ports (1 LAN, 1 WAN) with RJ45 front connector	Nr.4 Fast Ethernet 10/100Tx ports (3 LAN, 1 WAN) with RJ45 front connector
Serial ports	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps
USB ports	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port
4G+ / UPS	With optional module	With optional module	With optional module	With optional module
Industrial / IT protocols	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba
IoT protocols	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post	MQTT(s), OPC UA, https, http post
Security / VPN protocols	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS
Energy protocols	No	No	No	No
Wi-Fi	No	No	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2
SETTINGS & ADVANCED FUNCTIONS				
Configuration	Web Server, Easy Setup2	Web Server, Easy Setup2	Web Server, Easy Setup2	Web Server, Easy Setup2
IEC 61131-3 Control Logic	No	No	No	No
VPN management software	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX
Management tools	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)
IoT supports and third-party platforms	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA

EDGE DEVICES / INDUSTRIAL IOT SOLUTIONS
IIoT Gateway / Straton Controllers

	R-PASS-0-2-S	R-PASS-0-4-S	R-PASS-W-2-S	R-PASS-W-4-S
				
	Compact multifunction IIoT gateway / Straton PLC, 2 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC, 4 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC, Wi-Fi, 2 Ethernet ports	Compact multifunction IIoT gateway / Straton PLC, Wi-Fi, 4 Ethernet ports
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Power consumption	Max 8 W	Max 8 W	Max 8 W	Max 8 W
Battery / UPS	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module	With R-COMM add-on module
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Isolation	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways	1.500 Vac @ 3 ways
USB Host	Yes	Yes	Yes	Yes
Flash Memory (data)	>= 4 GB	>= 4 GB	>= 4 GB	>= 4 GB
Protection degree	IP20	IP20	IP20	IP20
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C
Storage temperature	-30..+80°C	-30..+80°C	-30..+80°C	-30..+80°C
Humidity	10..90% non condensing	10..90% non condensing	10..90% non condensing	10..90% non condensing
Connections	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x4)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x2)	3,5 mm pitch terminals USB Type A connector Micro USB connector RJ45 connector (x4)
Built-in I/O	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)	Nr.4DI, Nr.4DO (PNP/NPN), Nr.2AI (V, I)
Dimension (wxhxd)	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm	106 x 90 x 32 mm
Weight	170 g	170 g	170 g	170 g
Case	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black	PC / ABS self-extinguishing UL94-V0, color black
Mounting	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted	DIN-rail EN 60715, wall-mounted / panel-mounted
Approval	CE	CE	CE	CE
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Serial ports	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps	Nr.1 RS232 / RS485 port on terminals , max baud rate 115k Nr.1 RS485 port on terminals , max baud rate 115kbps
USB ports	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port	Nr.1 full host USB port Nr.1 Micro USB debug port
4G+ / UPS	With optional module	With optional module	With optional module	With optional module
Industrial / IT protocols	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen	ModBUS TCP-IP Server/Client, ModBUS RTU Master/Slave, MeterBUS master, SNMP, S7 Client, OPCUA Client/server, FTP/FTPs Client, FTP/sFTP Server, HTTP/HTTPS server, SMTPs client, Samba, J1939, CANopen
IoT protocols	MQTT(s), OPC UA , https, http post	MQTT(s), OPC UA , https, http post	MQTT(s), OPC UA , https, http post	MQTT(s), OPC UA , https, http post
Security / VPN protocols	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS	OpenVPN, TLS
Energy protocols	No	No	No	No
Wi-Fi	No	No	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2	Built-in WiFi 802.11 b/g/n, band 2.4 ÷ 2.4835GHz, max Output Power: 17dBm (50 mW), security WEP / WPA / WPA2
SETTINGS & ADVANCED FUNCTIONS				
Configuration	Web Server, ZNET4	Web Server, ZNET4	Web Server, ZNET4	Web Server, ZNET4
IEC 61131-3 Control Logic	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3	SoftPLC Straton IEC 61131-3
VPN management software	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX	VPN BOX Manager, OpenVPN, VPN Client Communicator, VPN BOX
Management tools	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)
IoT supports and third-party platforms	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA	Cloud BOX, LET'S, MQTT(s), OPC UA

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