



# Z-PASS2-S

## STRATON REMOTE CONTROLLER WITH BUILT-IN I/O, \*3G+/4G\*, MODEM, ETHERNET ROUTER, GPS

### Highlights

- **Controller based on SoftPLC StratON IEC 61131**
- **Nr.2 Fast Ethernet ports 10/100 Tx on RJ45 front connector**
- **Nr.1 RS232/RS45 switchable port**
- **Nr.2 RS485 ports**
- **Nr.1 USB host port**
- **Nr.1 worldwide pentaband 3G+ or 4G LTE modem with built-in GPS**
- **Nr.6 built-in digital channels**
- **Supported protocols: ModBUS TCP Server, ModBUS RTU Master/Slave, FTP/SFTP Server, HTTP/HTTPS Server, OpenVPN, SLL**
- **Optional Energy management protocols (IEC 60870-101, IEC 60870-104, IEC 61850)**

Z-PASS2-S is a high performance multifunction controller including PLC, routing and remote access functions. The device is based on Straton softPLC with web server, VPN and 3G + or 4G LTE modem/route.

Equipped with nr.2 Fast Ethernet ports (managed in Switch mode and LAN / WAN), Nr. 1 RS232/RS485 port, Nr.2 RS485 ports and nr.1 USB host 2.0 port, Z-PASS2-S supports ModBUS TCP Server, ModBUS RTU Master/Slave, FTP/SFTP Server, HTTP/HTTPS Server, OpenVPN, SLL and – optionally - Energy Management protocols (IEC 60870-101, IEC 60870-104, IEC 61850).

The controller has nr.1 digital input for remote secure security, nr.1 digital output VPN signalling connection and nr.4 digital configurable channels. The device is programmable via Z-NET4 (SENECA system configuration environment) and web server. It includes a ARM9 processor, 1 GB Flash, 64 MB RAM and a Micro SD slot up to 32 GB.

Integrated into LET'S platform for remote assistance and telecontrol, ZPASS2- S can support Point-To-Point or Single LAN connections.



# Z-PASS2-S



## STRATON REMOTE CONTROLLER WITH BUILT-IN I/O,\*3G+/4G\* MODEM, ETHERNET ROUTER, GPS

### TECHNICAL DATA

#### GENERAL DATA

|                       |   |
|-----------------------|---|
| Power Supply          | 19..40 Vdc; 19..28 Vac  |
| Power Consumption     | Typical 4 W @ 24Vac, Max 6 W  |
| Isolation             | 1500 Vac  |
| LED Status Indicators | I/O status / Remote Connection (RCD) / VPN connection (VPN) LAN/WAN (Ethernet mode) / SERV (VPN BOX Service) Rx-Tx serial communication / Ethernet link / traffic |
| Protection Degree     | IP20  |
| Operating Temperature | -20 °C..+65 °C  |
| Dimension (wxhxd)     | 100 x 52,5 x 112 mm   |
| Weight                | 280 g   |
| Case                  | PA6 glass fiber reinforced , black color  |
| Mounting              | 35 mm DIN rail IEC EN 60715   |

#### COMMUNICATION

|   |   |
|---|---|
| Ethernet ports (ETH1, ETH2)                 | Nr.2 Fast Ethernet 10/100Tx ports on RJ45 front connector   |
| Serial ports (COM1, COM2, COM4)             | Nr.1 switchable RS232 / RS485 serial port, max baud rate 115kbps on connector<br>Nr.1 RS485 port, max baud rate max 115kbps on IDC10 connector<br>Nr.1 RS485 port, baud rate max 115kbps on terminals<br>Nr.1 USB host port on side connector type A                            |
| Modem / Router 3G+ Worldwide*               | GSM /GPRS/EDGE Quad-band: GSM 850 MHz, GSM 900 MHz, DCS 1800 MHz, PCS 1900 MHz 850-900-1800-1900 MHz<br>UMTS/HSPA+ Penta-BAND : WCDMA 2100/900, 2100/850, 1900/850 MHz<br>GNSS: 30 Channels: GPS 16 channels and GLONASS 14 channels  |
| Modem / Router 4G - LTE*                    | 4G/LTE Model (Europe, Africa, Middle East, Korea, Thailand, India)<br>GSM/GPRS/EDGE Dual-band: 1800/900 MHz<br>UMTS/HSPA+ Tri-Band: WCDMA 2100/850/900 MHz<br>4G LTE BAND 6-Band: 2100/1800/ 850/ 2600/ 900/ 800 MHz<br>GNSS: GPS/GLONASS/BeiDou/Galileo/QZSS up to 55 channels |
| Industrial protocols                        | ModBUS TCP server, ModBUS RTU master, ModBUS RTU slave.   |
| IT protocols                                | FTP server, SFTP server, HTTP server, HTTPS server, OpenVPN   |
| Energy protocols (opt.)                     | IEC 60870-101/104, IEC 61850  |
| Nr. Max client VPN                          | Point-To-Point: 1; Single LAN: 496  |
| Nr. Max simultaneous TCP client connections | 32  |
| Operating Functions                         | ModBUS Gateway, 3G+/Ethernet Router, VPN, Telecontrol single LAN, Remote Assistance Point-To-Point, LAN / WAN, Switch Ethernet, Layer 2 - Industrial Ethernet (Point-To-Point connection mode)  |

#### CPU & MEMORY

|                     |                  |
|---------------------|------------------|
| Processor           | ARM 32 bit       |
| Flash Memory (data) | 1 GB             |
| RAM                 | 64 MB            |
| FeRAM               | 4 kB             |
| Slot Micro SD       | Yes, up to 32 GB |

#### I/O

|                    |                             |
|--------------------|-----------------------------|
| Assigned Signals   | 1DI / 1DO (VPN Connections) |
| Free Use           | 1 DI / 1 DO                 |
| Programmable mixed | 2 DI/DO                     |

#### SECURITY

|                     |   |
|---------------------|---|
| Remote Access block | Mechanical, Inteblock digital input for remote connection |
| Decoupling LAN/WAN  | Si  |
| Data Encryption     | 128bit  |
| Data Authentication | SHA1 160bit   |
| Security protocol   | OpenVPN, SSL, HTTPS Server                                |

#### SETTINGS & SOFTWARE

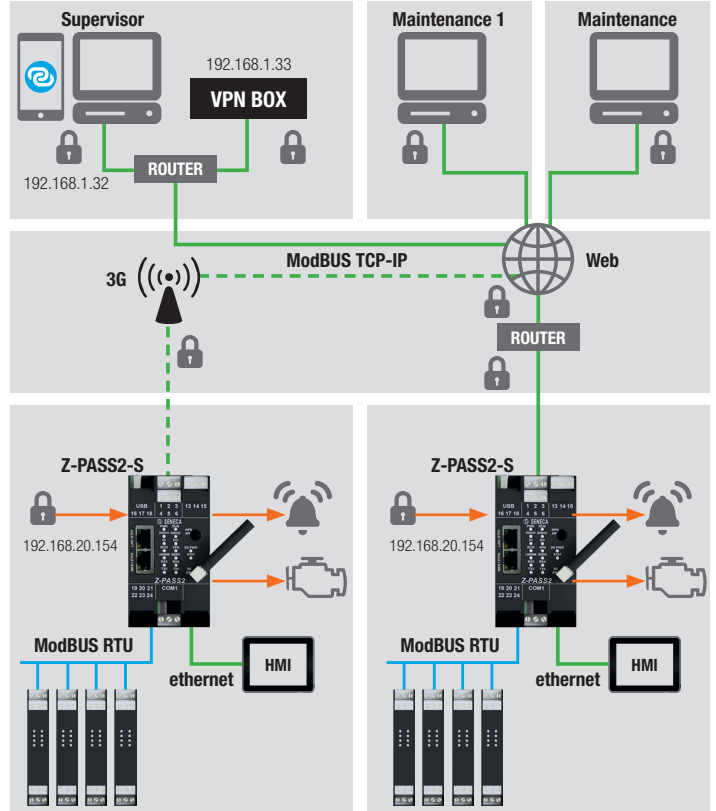
|                  |   |
|------------------|---|
| Tools & Packages | Web Server, VPN Box Manager, VPN Client Communicator, Seneca Discovery Device, Z-NET4 system configurator, Straton IEC 61131 programming system, Log Factory, Web Factory |
|------------------|---|

#### STANDARD

|           |   |
|-----------|---|
| Approvals | CE  |
| Norms     | ETSI EN 301489-7, EN 61000-6-4, EN 61000-6-2, EN 301511, EN 301489-1, EN 301489-7, IEC / EN 60950 |

\* alternatively

### APPLICATION NOTE



### ORDER CODES

| Code                    | Description  |
|-------------------------|--|
| <b>ROUTER / GATEWAY</b> |  |
| Z-PASS2-S-I0            | VPN Straton Remote Controller, 2DI, 2DO, 2DI/DO, worldwide modem, 3G+/Ethernet Router                        |
| Z-PASS2-S-I0-E          | VPN Straton Remote Controller, 2DI, 2DO, 2DI/DO, worldwide modem, 3G+/Ethernet Router, GPS, energy protocols |
| Z-PASS2-S-I04GEU        | VPN Straton Controller, 2DI, 2DO, 2DI/DO, modem 4G/Ethernet Router, GPS                                      |
| Z-PASS2-S-I0E4GEU       | VPN Straton Controller, 2DI, 2DO, 2DI/DO, 4G Modem/Ethernet Router, GPS, energy protocols                    |

### VPN PLATFORM

|              |  |
|--------------|--|
| VPN BOX      | LET'S - VPN Server for Point-to-Point / Single LAN connections                                 |
| VPN BOX VM   | LET'S - VPN Server Virtual Machine for Point-to-Point / Single LAN connections                 |
| VPN BOX-D    | LET'S - VPN BOX Point-to-Point service, 30 day free trial up to 2 devices                      |
| VPN BOX VM-D | LET'S - VPN Server Virtual Machine for Point-to-Point / Single LAN connections up to 2 devices |
| VPN CC       | LET'S - VPN Client Communicator, remote access software  |
| VPN CC APP   | VPN CC mobile App version  |

### TOOL SOFTWARE

|                 |  |
|-----------------|--|
| Log Factory     | Visualization and log data tool for Z-GPRS3, Z-LOGGER3, Z-UMTS                   |
| SDD             | SENECA Discovery Device, IP scanner for Z-KEY, Z-PASS1, Z-PASS2                  |
| SESC            | SENECA Ethernet to Serial Connection tool for Z-KEY, Z-PASS1, Z-PASS2            |
| Straton         | IEC 61131 IDE and licenses (www.seneca.it or support@seneca.it for more details) |
| TEMP-TAG-Z-PASS | Excel template for Z-PASS-1/2/2S tags (gateway mode)                             |
| Web Factory     | HMI / Web Editor embedded in Z-NET4  |
| Z-NET4          | Z-PC system configurator, Web Editor included                                    |

### ACCESSORIES

|                  |   |
|------------------|---|
| A-GPS-SMA        | GPS antenna with SMA connector                                |
| A-GSM            | Dual band swing GSM external antenna, cable 3,2 m, SMA        |
| A-GSM-QUAD-N     | 4G/WiFi omnidirectional antenna, FME, L=3mt                   |
| CS-TIP-MEF-PH    | Serial communication cable (tips/4-ways connector)            |
| CSD89M-MEF-PH    | Serial communication cable (DB9M / MEF 10-12) 3 wires, 1,5 mt |
| CE-RJ45-RJ45-R   | Straight-thru Ethernet cable (RJ45-RJ45)                      |
| MSD              | Micro SD memory card with adapter                             |
| Z-PC-DINAL2-52.5 | DIN rail bus system head terminal + 2 slots 52.5 mm           |



Via Austria, 26 • 35127 Padova - (I) - Tel. +39 049 87.05.359  
Fax +39 049 87.06.287 • www.seneca.it • info@seneca.it

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