

Regesta Smart PRO v2

Regesta Smart PRO v2 Router



Introduction

The Regesta Smart PRO v2 router family brings cutting-edge corporate IP network protocols to the smart grid world. Engineered for remote, unattended sites, these rugged routers thrive in the toughest environments. And now with doubling the processing capacity vs the previous Regesta version.

Powered by Teldat's advanced software, they offer top-tier security with encryption, authentication, and access control. With seamless connectivity and easy management, the Regesta Smart PRO v2 is perfect for large-scale, secure deployments—making it the smart choice for industries needing reliable performance in demanding conditions.

Product Highlights

- Multiple WAN (SFP, 2G/3G/LTE, Ethernet)
- SCADA (Modbus, IEC-101/102, IEC-104 gateway)
- Multiple power supply options (DC, AC, Multirange)
- Complies with electrical security & EMC regulation
- DMVPNs, VLANs and QoS for critical services
- Dual-SIM redundancy
- Compatible with Teldat SDWAN solution

Interfaces

One 2G/3G/LTE module	Yes
Up to 7 x 10/100/1000 Mbps Giga Ethernet	Yes (3 or 7 ports option)
Up to 3 x asynchronous serial ports	Yes (RS-232 + RS-485 depending on model)
Mechanical reset button	Yes (return to factory default)
1 x SFP interface + 6 x RJ45	Yes
LEDs	Power, SFP, SIM, serial, etc.
2 x SMA antenna connectors	Yes
2 x SIM Trays	Yes



Competitive Advantage

Reliable communications and hardware	Multiple access technologies employed (WWAN, SFP + LTE, SFP+Ethernet) with real-time backup mechanisms, SNMP trap notifications and alerts.
Rugged hardware design	Adaptable hardware design for unattended installations, with extended temperature range (-25 to 70 °C) and electrical/electromagnetic immunity.
Multiple power supply options	The best option for each scenario: DC (12-72 VDC), AC (110-240 VAC) and Multi-Range (48-72 VDC, 100-240 VAC) for networks with diverse power supplies
Corporate networking software	The latest IP network technologies for smart grid communications bringing security, quality and ease of use to large-scale multi-service deployments.

Key Features

- Up to 7 10/100/1000 GE ports with VLAN, 802.1X, duplex** Regesta Smart Pro v2 routers feature 3 Gigabit ethernet ports (2 RJ45 + 1 SFP), all of them could be setup as WAN interface. Models with an additional 4 RJ45 ports Gigabit Ethernet switch are also available.
- 2G/3G/4G (dual-SIM)** Embedded 2G/3G/4G interface with a dual SIM card tray for automatic backups. Advanced Teldat system for proactive monitoring and automatic recovery from WWAN incidents.
- Extended temperature range (-25 to 70 °C)** The Regesta Smart PRO v2 housing is designed for optimal heat dissipation, can be mounted on a DIN rail or wall, and guarantees operation between -20 and 70 °C with up to 93% humidity.
- Serial ports with SCADA protocol support** It is able to incorporate serial interfaces (up to a total of 3 serial ports) with SCADA protocols, thus providing the versatility to connect to industrial meters, RTUs and other control devices.
- IEC-101 to IEC-104 serial-IP and gateway encapsulation** Data from the serial port can be transparently encapsulated with IP. The "IEC-101 to IEC-104 gateway" function also allows IEC-101 TRUs to be maintained and central management software to migrate to IEC-104.
- Multiple power supply options (DC, AC and MR)** 2 power supply options: DC (12-72 VDC), AC (110-240 VAC) and multirange power supply (48-72 VDC, 100-240 VAC) where both ranges are supported in a single model for easy deployment and maintenance.
- Certified for use in electrical environments** The routers are certified for use in electrical environments with EMC, isolation, immunity, electrical, climatic and mechanical certificates.
- Security: 802.1X, ACLs, firewall and DMVPNs (IPSec)** The Regesta Smart PRO v2 offers state-of-the-art security —ACLs, firewall, 802.1X, IPSec with hardware encryption, DMVPNs—ensuring safe, scalable, and easy-to-manage deployments in smart grid networks.
- Advanced services (routing, management, QoS)** The Regesta Smart PRO v2 includes a software stack with advanced functions requires by advanced IP networks, such as QoS, policy routing, DMVPNs, VLANs and VRF, providing maximum versatility for shared services.
- Out-of-band management console port** The console port facilitates troubleshooting and installation at remote points.

HARDWARE TECHNICAL FEATURES

SFP interface (optional)

Multimode SFP (LC connector)
Single mode SFP (LC connector)
Simplex SFP (LC connector)

Up to 3 Serial Interfaces (DB9 connector)

Asynchronous up to 115200 bps
RS-232 and RS-485 options
RTS/CTS and SCADA flow control (Modbus, IEC-101/102, IEC-104 gateway)

Dimensions and weight

L x W x H: 140 x 192 x 80 mm
Approximate weight: 1 Kg.
Format: DIN track and wall mounting

Ethernet interfaces

Up to 6 ports Ethernet switch (RJ45 connector)
802.3i (10 BaseT), 802.3u (100 BaseT), 802.3ab (1000 BaseT)
Supports duplex, IEEE 802.3u link speed auto-negotiation, VLAN and 802.1X

WWAN interface (optional)

Built-in hardware module with LTE technology
2 x external antennas with SMA connector
Dual SIM trays (internal)

Environmental specifications

Temperature: -25 to 70° C
Relative humidity: 5 to 93%

SOFTWARE TECHNICAL FEATURES

IP protocol

ARP, ARP Proxy, MTU discovery, NAT, ECMP, BFD
RIP, OSPF, BGP, Policy based static and dynamic routing
Virtual Router Forwarding (Multi-VRF)

Security

IPSec support in transport and tunnel mode
Pre-shared authentication, RSA, Certificates, MDS, SHA-1
DES (56 bits), 3DES (168 bits), AES (128, 192 and 256 bits), IKEv1, IKEv2

IP services

Telnet, DHCP, DNS, FTP, SFTP and SSH server and client
NTP, LDAP, Syslog, SCP client. TFTP server
DHCP, dynDNS relay

Specific WWAN functions

Automatic hand-over (passive and active probe-based detection)
Advanced link monitoring (packet, latency, jitter error)
Dual SIM associated with the hand-over mechanism

Management (2)

Netflow, RMON V5 and V9, SNMPv1, v2c and v3, Syslog support
Manageable via SMS and Zero Touch Provisioning with Cloud Net Manager
Wireshark-compatible remote traffic capture

IP protocol (2)

Multicast: IGMP (v1,v2, v3), PIM-SM, MSDP, MLD, MLDv2
IPSLA service probes (delay, packet loss, jitter)
High availability: VRRP, TVRP (HSRP (compatible))

Security (2)

Certificates: CSR, SCEP, X.509v3, PKIX, LDAP revocation
Static and dynamic access lists and Stateful Firewall
DoS and DDoS attack detection

Service quality

Classification, marking, bandwidth
Up to 32 types 16 queues per interface
Strict policies (PQ), Low latency (LLQ), according weight/types (WFQ, CBWFQ)

Management

CLI and GUI configuration
Assignment of user and user profile licenses
RADIUS and TACACS+ compatible AAA support

ADDITIONAL TECHNICAL FEATURES

LEDs

1 Power, 1 Switch, 2 LAN/WAN
2 wireless status/coverage, 1 SIM
1 SFP, 2 serial

Certifications (II)

Immunity (I): EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5
EN 61000-4-6, EN 61000-4-8, EN 61000-4-10, EN 61000-4-12, EN 61000-4-13
Immunity (II): EN 61000-4-18 Electrical: EN 61000-4-11 and EN 61000-4-29

Certifications (I)

Isolation (EN 60255-5) for electrical resistance and impulses
Climatic: EN 60068-2-78, EN 60068-2-2, EN 60068-2-1, EN 60068-2-14
Mechanical: EN 60870-2-2, EN 60068-2-6 EN 60068-2-27

Scenarios

