

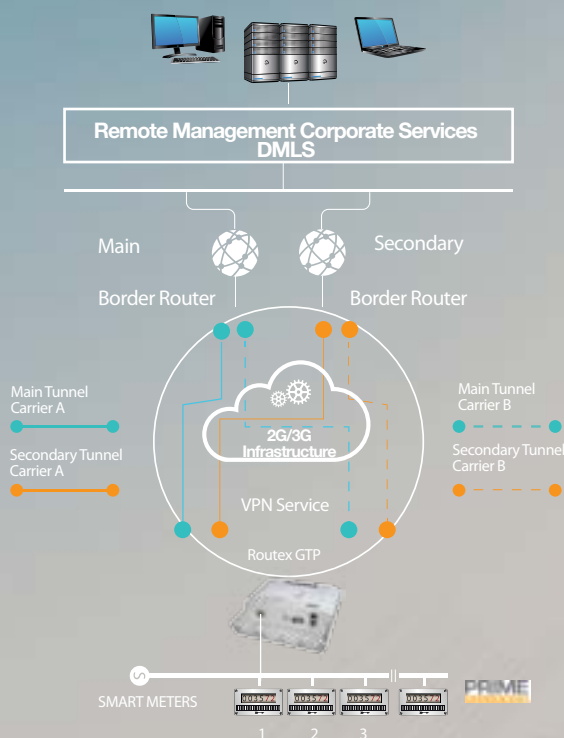


ROUTEX GTP

PRIME Telecommunications Gateway



⊕ Integration Diagram



ⓘ General Information

- GTP is an industrial cellular communications gateway which includes a PLC interface for communications with SMART-METERES. GTP brings together Noxium's Routex reliability and security with PLC's communications versatility providing an ideal solution for SMARTGRID networks with last generation intelligent meters.
- From a Security stand point, GTP enables dynamic tunneling, information encryption and smart routing.
- GTP also includes a switch wich offers great versatility when configuring different services or applications co-existing in the same infrastructure. Its flexible configuration and WLAN's offer a wide range of routing options.
- In Highly available environments, this device operates with redundancy and self-monitoring in an active-active configuration, ensuring low latency delays and enhancing re-activation time. Always in a secure communication environment. In addition, there are GTP versions with Radio redundancy.
- High MTBF and low maintenance costs are achieved using SNMP, Syslog, debugging and diagnosis tools as well as remote configuration and update features.

☰ Main Features

- Compact, ergonomic and easy to instal, use and diagnose.
- Configurable PLC Communications on Service Node or Base Node with network topology auto-discovery.
- Compatible with DLMS systems and PRIME PLC communications.
- It incorporates advance switching functions such as Tagged VLAN and VLAN Discriminated Services. ACL, NAT, PAT and MAC filtering.
- WAN services Multiplex via auxiliary modem or routers.
- Redundant VPN Tunnel set-up with active service surveillance. It supports DMVPN (GRE+IPSec+NHRP) up to 4 tunnels (2 tunnels/SIM).
- Programmed re-boot to enable recovery after failure.
- Firmware OTA, via FTP, STFP and TFTP.





BENEFITS AND FEATURES

Communications



- Two Fast Ethernet 10/100 network ports
- Low voltage PLC communications
- Up to two SIM trays with polarity, blocking and Active SIM and Screwed SMA indicators
- Optional Wireless communications
- Communications, power and network coverage indicators.
- Up to two GPRS Clase B, CS1 to CS4 radios (850/900/1800/1900/2100 MHz).
- UMTS: 850/1900/2100 MHz.
- HSPA: 850/950/1800/1900 MHz.

Electrical Features



- Power supply 80V-265Vac.
- Optional Back-up battery for 0,5h full autonomy.
- Adjusted consumption up to 6W max.
- Communications interfaces insulation up to 3.750V

Hardware and environmental features



- Dimension 175x125x50mm (WxHxD)
- Aprox weight 350gr
- Operating Temperature range -10°C to 60°C
- Relative humidity range 5 to 95%
- IP51
- IP51

Connectivity



- Dual SIM, with advanced switching criteria: Signal level, Keep-alive (TCP-3way Handshake and Ping) and network latency.
- Connected to any mobile carrier using 2,5G, 3G and 4G PAP and CHAP authentication.

Advanced Features



- Remote and local command console (SSH)
- Web Services configuration HTTP/HTTPS
- Firmware OTA updates via FTP, STFP y TFTP.
- Sniffer and troubleshooting

IP Protocols



- TCP/IP Protocol Stack
- Management Protocols: SNMP v2c, v3 with MIB II and Noxium MIB
- Supports multicast
- Static and Dynamic routing RIP v2
- Port Forwarding and ACL, NAT, NAT-T, SNAT, DNAT routes and Port Mapping
- Client, Server and relay DHCP
- Client and proxy DNS. Caché DNS
- Local and remote Syslog
- Bridging functions and Spanning Tree Protocol (IEEE 802.1d)
- VLANs (IEEE 802.1Q y 802.1p)
- VLAN dependent QoS
- VRRP High availability
- NTP Remote configuration

Security, Authentication and VPNs



- Supports SSL 3.0 and TLS 1.2
- Dynamic Multipoint IPSec VPNs (DMVPN) with multiple IKE/ISAKMP and advance detection for carrier and tunnel switching.
- Encryption: 3DES, AES128, AES256
- Authentication: SHA1, SHA256, MD5
- Diffie-Hellman MODP1024, MODP2048, MODP4096
- High availability algorithm on DMVPN tunnel switching and Control centre connection redundancy.
- Surveillance functions for active tunnel keepalive using GRE and NHRP
- Supports TACACS+ compatible AAA

PLC NODE



- Configurable as Service Node or Base Node
- PRIME 1.3.6 version (1.4 on demand)
- Compatible with Remote DLMS systems and it incorporates the required PRIME layers to enable management of smart networks with high density of devices. (up to 150 PLC meters)
- FW update protocol on Service Node
- Topology discovery and monitoring.