OAP800-LTE DIN Rail Wireless Gateway with GPS & 2G/3G/4G LTE

The OAP800-LTE is a ruggedised, DIN rail mountable, 8-Port wireless router for critical infrastructure and industrial applications with zero on-site provisioning, VPN & Firewall capabilities.

The Avara OAP800-LTE is a family of DIN-rail mountable, 8-port managed wireless router with RS232 serial ports, GPS and digital I/O capabilities that have been specifically designed to provide a compact solution for delivering Ethernet & Serial services in industrial applications.

It provides a routed wireless connections to industrial and process automation equipment located at remote locations.

8x10/100Base-T tributary interfaces are provided which can operate at 10 or 100 Mbps rates with optional MSA compliant SFP ports.

GNSS capabilities are provided with support for GPS & GLONASS satellite systems.

Additionally, a 2x2 MIMO wireless 4G LTE uplink with dual SIM support is also available providing an ideal solution for connectivity to remote RTU devices, process control equipment, IP cameras and other sensor equipment.

Multi WAN functionality is supported allowing any physical Ethernet port to operate in LAN or WAN mode to provide resilient network connectivity.

The OAP800-LTE also delivers high performance Layer 2 Ethernet switching in a compact form factor. Tag based VLANs compliant with 802.1q/p are supported allowing network segmentation with traffic prioritisation without being restricted by physical connections.

Serial data interfaces are supported via terminal server functionality. Raw TCP and UDP access is provided on a selectable port allowing seamless access to remotely located field serial devices.

To enhance security, the OAP800-LTE supports SSH, HTTPS, 802.1x, RADIUS & SNMPv3 together with machine Access Control Lists to ensure that only trusted users and devices gain access to the network.

The OAP800-LTE can be managed locally via the console port or remotely using ASPeCT, SSHv2, Telnet, SNMP or a web browser over a secure VLAN.

VPN technologies are also available to provide secure connections over public networks to ensure daya integrity & confidentiality.

A variant also supports multiple digital I/O capabilities thus providing a cost effective and space optimised solution for providing basic automation functionality.

The OAP800-LTE supports zero on site configuration when used with Avara's ASPeCT NMS by dynamically connecting to a central server to get its running configuration, delivering a true "Plug and Go" solution.

A comprehensive set of SNMP traps and alarms are provided for fault management and isolation. Event logging using Syslog & SNMP traps is also available to support audit trail implementations.

The OAP800-LTE is a low power device making it an ideal solution for solar powered deployments. The OAP800-LTE also supports dual power feed functionality to enhance system availability.





Technical Highlights

- 8 x 10/100Base-T
- 2 x SFP ports (1000Base-X, 1000Base-T, VDSL2)
- 2 x RS232 Async or 4 x Digital I/O for Industrial Automation Applications
- 2 x MIMO cellular operation
- Dual SIM Support
- WiFi with 802.11b/g/n support
- Integrated 4G LTE CAT 4 industrial cellular module
- Multiple Band Support including 700, 1800 & 2100MHz
- 3G UMTS/HSDPA/HSUPA
- 2G GSM/EDGE
- Concurrent reception GNSS
- 802.1p, 802.1q (4096 VLANs) with Rate Limiting
- MAC Address Allow Lists
- Remote Management via SNMP, Telnet, CLI, Web Server or OAM messages
- SSH, HTTPS, 802.1x, RADIUS & SNMPv3
- OSPF, RIP v1/v2, BGP, VRRP & NAT
- VPN (OpenVPN, L2TPv3, IPSec)
- High MTBF
- 10-36 or 20-60 VDC Operation with Dual Power Feeds
- -25°C to +70°C Operation
- Fanless Operation

Order Code	LTE	10/100	RS232	Digital		Dry Contact Outputs	GPS	GE SFP	Power Feeds
				I	O				
P21052.52	Y	8 x RJ45	-	4	4	2	Y	2	Dual

Technical Specifications

Cellular **4G LTE** Frequency (MHz) Bands Theo. DS/US Speed Max. Modulation RF Output Power **3G** Frequency (MHz) Bands RF Output Power **2G** Frequency (MHz) Bands **MIMO**	 **Cat 4 FDD-LTE (3GPP Rel 9)** 2100/1800/2600/900/800/700 1, 3, 7, 8, 20, 28 150/50 Mbps 64QAM Class 3 (23dBm/0.2W) **UMTS/HSDPA/HSUPA** 2100/900 1, 8 Class 3 (25dBm/0.32W) **GSM/EDGE** 1800/900 3, 8 2 X 2	**Power** Operating Voltages Power Supply Feeds Power Consumption	 P21052.52: 10 to 36 VDC Dual 13 W (max)
		Digital I/O-All P21052.2X/5X only Inputs Isolation Outputs Output Type Over-Voltage Prot.	2 x Outputs (Relay) 4 Optically Isolated, 2kVrms 4 Optically Isolated, 50mA max @24V 50V
		Environmental Operating Temperature Relative Humidity	 -25°C to +70 °C 5-90% (Non-condensing)
Cellular Connectors	2 x 50 Ohm SMA	**Enclosure** H x D x W	IP30 protection DIN-Rail mounting 140mm x 107mm x 45mm
GNSS Satellite Systems Supported	GPS, GLONASS	**Layer 2 Switching** Speed Autonegotiation Duplex MDI/MDIX Support IEEE 802.p/q Mac Address size VLANS supported Rate Limiting Traffic shaping Priority Queues Per Output	 10/100Base-T Yes Full/Half Yes Yes 8K 4096 128K, 256K, 512K, 1M, 2M, 4M, 8M Strict & Weighted Round Robin 4
Access Interfaces Ethernet Serial Data	 8 x 10/100 Base-T (RJ45) 2 x SFP (P21052.0X/5X only) 2 x RS232 (P21052.0X only)		
Management Local Remote	 CLI via Console RJ45 SSHv2, SNMP, Web, OAM		
Network Access Security	SSH, SNMPv1/v2c/v3 802.1x RADIUS HTTP/HTTPS SCP Password Protection Management ACL, Stateful Packet Inspection firewall, MPLS or satellite connectivity	**Time Management**	SNTP NTP
		Event Logging	Syslog SNMP Traps
		Protocols	TCP, UDP, ICMP, PPP, PPPoE, DHCP, DDNS
Data Interface Security & VPN	MAC Address Locking, Dedicated VLAN Open VPN (SSL) IPSec L2TPv3, GRE	**Standards** RFC1157 SNMP RFC1213 MIB II RFC854 Telnet RFC783 TFTP RFC2865 RADIUS RFC4251 SSHv2 RFC3164 Syslog IEEE 802.3 IEEE 802.1x IEEE 802.1D IEEE 802.1q IEEE 802.1p IEEE 802.11/b/g/n	EN60950 Safety EN55022 Class A Emissions EN55024 Immunity EN50082-2 Generic Immunity EN300-386 Telecommunications EN61000-4-2 ESD EN61000-4-3 Radiated Sus. EN61000-4-4 EFT EN61000-4-5 Surge Burst EN61000-4-6 Conducted Sus. EN60950 ETS 300 019-1-1 Operational ETS 300 019-1-2 Storage ETS 300 019-1-3 Transport
Layer 3 Routing	Static Routing OSPF, RIP v1/v2, BGP VRRP NAT Port Forwarding Multiple Routing Tables ACL		

Head Office

1/45 Normanby Road
Notting Hill, Victoria 3168
Australia
Tel: +61 3 95400330
Fax:+61 3 99236545

www.avaratechnologies.com

Regional Distributor

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