VIRTUAL ACCESS

CRITICAL APPLICATION CONNECTIVITY

GW7600 Series Router

Multi-WAN Resilient Business Connectivity

- Pseudowire
- Multi path DSL, dual SIM, LTE, 3G, HSPA+ Wireless
- Voice and data
- Optional 802.11n WiFi
- Optional ISDN, sync and async serial
- Secondary (PSTN) interface

Overview

Based on LTE, 3G, WiFi and ADSL2+ technology, Virtual Access GW7600 Series routers address the needs of today's businesses for managed resilient broadband connectivity.

Point of Sale (PoS), retail branch office, security monitoring and other key business applications demand managed connectivity that is cost-effective, high performance and resilient to network outage or last mile circuit failure.

Designed for managed network providers, GW7600 Series routers provide secure WAN connectivity for Internet and private networking environments over both ADSL2+ and wireless broadband paths and incorporate optional 802.11n WiFi connectivity.

Automatic Failover

GW7600 Series routers provide optional automatic failover from fixed to wireless circuits ensures business connectivity through network or last mile circuit outages, whilst email alerting and auto-failback confirm primary circuit restoration.

PCI DSS Compliance for Retail Markets

Businesses that process, store or transmit credit card data, these days, must increasingly meet security requirements known as the Payment Card Industry Data Security Standard (PCI DSS). The GW7600 Series is designed to meet PCI DSS requirements. It offers an extensive range of security, filtering and configurability functions enabling businesses to easily lock down computer and payment networks.

Four Port 10/100 Managed Switch

The four port 10/100 managed switch enables multiple devices to be connected in retail and branch office environments with the ability to segment into individually filtered subnets or DMZs. Tagged VLAN (802.1q) segmentation offers further versatility for diverse network applications.

Advanced Security

GW7600 Series routers deliver business grade security services including:

- IPSec (3DES and AES)
- L2TP
- Stateful firewall

Optional 802.11n WiFi

The GW7600 Series router optionally incorporates WiFi connectivity. The WiFi module utilises the latest 802.11n 'Multiple Input and Multiple Output' (MIMO) smart antenna technology. The WiFi security attributes can be remotely managed and can be configured for either WiFi server or WiFi client mode of operation.

Optional Dual SIM LTE 3G HSPA+Wireless

The GW7600 Series optionally incorporates LTE and HSPA+ wireless technology. Dual SIM architecture ensures that a backup 3G network can take over should the primary network fail. The router detects a network problem and fails over to a standby SIM/ APN if necessary, ensuring customers' SLAs are upheld. The GW7600 Series wireless functions also include support for inbound and outbound SMS, so for instance, if all other WAN services are unavailable, commands can be sent to the router to perform diagnostics or even reset function.

Dual Radio

The GW7600 Series router is a mobile dual radio router offering resilient connectivity using multiple operators and/or mobile technologies. The GW7600 Series router creates extremely reliable, robust and secure broadband data connectivity for all critical applications.

Optional ISDN

The GW7600 Series optionally incorporates ISDN TE or NT interfaces. RJ45 presentation allows service providers to continue providing legacy services.

Secondary (PSTN) Interface

An internal PSTN dial modem optionally incorporated with GW7600 Series models offers 'out of the box' automated router configuration and out-of-band router access for managed ADSL service applications.

Automated Router Provisioning

As with all Virtual Access routers, the GW7600 Series offers simplicity when it comes to service provisioning. Using the centralised service management models from Virtual Access, the task of physical router configuration is minimised.

Router profiles are configured centrally enabling rapid services deployment to the end-customer sites. This process offers service providers considerable business benefits in large scale router deployments.

Centralised Router Monitoring

The Virtual Access Monitor is a secure portal that works in conjunction with each router installed at the edge of a customer's network. Monitor provides centralised access to device diagnostics and network availability status.

Software Features

Management

- Automatic configuration using Activator server
- HTTP/HTTPS
- Command Line Interface via Telnet or SSH
- TFTP client download/upload
- SNMP agent
- SMS management support

Fault Investigation and Reporting

- Event logging
- Syslog support
- Packet tracing

Routing Features

- IPv4 and IPv6
- DHCP server/client
- DynDNS
- NAT
- NAT Traversal
- NTP Client
- VLAN support
- Packet filtering
- Firewall
- Port forwarding
- BGPv4, OSPF
- RIP (v1 and v2)
- IPSec/L2TP/GRE
- SNMP v1/v2/v3
- TLS 1.2
- 802.1x authentication
- IEC 104

IPSec VPN

- IKE version 2
- X.509 certificates
- Elliptic Curve Cryptography (ECC)
- SHA2_512 support
- AES_CBC (256), 3DES and DES
- PFS
- SCEP
- DH_8192

ADSL

- G.992.1 & G.992.2 Annex A, B, M
- G.992.5 ADSL2+ Annex A, B, M

SCADA Support

- IEC 60870-5-104 to IEC 60870-5-101 gateway
- DNP3 TCP/IP to serial conversion

X.25 Support

- X.25 over TCP/IP (XOT)
- X.25 over X.25 Migration Protocol (XMP)
- X.3, X.28, X.29 PAD

Antenna for 3G Models

Advanced receiver diversity type 3i (GRAKE2+)

Antenna for LTE Models

- DC-HSPA+/HSPA/UMTS: receiver diversity
- DC-HSPA+/HSPA+ DL: 2x2 MIMO
- LTE DL: 2x2 MIMO

Hardware Features

WiFi

- 802.11n a/b/g 2TX/2RX
- Dual-band (2.4/5GHz)
- 2 x SMA female connectors

ADSL Interface

- RJ11 socket

LAN Interfaces

- 4 x 10/100 Mbps base-T Ethernet ports
- Auto detects full- or half-duplex operation
- Auto detects a regular or crossover cable for easy connection to a switch or hub

WAN Interfaces

- Wireless WAN with 3G and LTE options
- Ethernet ports can optionally be configured for WAN use

E1/T1 Interface

- 1 x E1/T1 interface
- 120 ohm balanced
- 75 ohm available with optional balun
- E1: output and tolerance according to G.823, transfer according to G.705
- T1: according to AT&T TR-62411

ISDN

- ISDN BRI, S TE/NT
- Includes adaptive clock recovery capability
- ISDN Q.931 to SIP conversion

VLAN Support

- Tag-based 802.1Q VLAN
- Port-based VLAN

Pseudowire Support

- CESoPSN: IETF RFC 5086
- SAToP: IETF RFC 4553

Dial Modem Interface (Optional)

- V.92 support up to 56Kbps
- Filter calls using Caller ID

Quad Async Serial Interface (Optional)

- 4 x RJ45 async serial ports
- RS232 and RS485 to 115.2Kbps

Sync/Async Serial Interface (Optional)

- Single sync/async serial port
- RS-232E, RS-422A, RS-449, RS-485, RS-530, V.24, V.35, V.36 on a 44-way D-type female connector
- Sync serial speeds up to 2Mbps
- Async serial speeds up to 115.2Kbps

Alarm Output (Optional)

- Isolated output relay contacts
- Screw terminals NO, Common, NC

Network Clock Recovery

- Adaptive clock recovery method

External Clock (Optional)

- Supports external telecom clock input and output
- RJ45 at rear of unit

Approvals and Certificates

- EN 60950 safety approval
- EN 55022 and EN 55024 EMC
- R&TTE, GCF for WCDMA
- R&TTE, GCF, FCC, PTCRB for EDGE

Power

- Dual DC inputs
- 100V-240V AC, 10 Watts
- IEC mains connector
- 9-36 or 18-75V DC isolated

Operating Temperature

- Operating temperature 0°C to 40°C
- Industrial operating temperature range -20°C to 65°C option available except for RFD and RFF which are -20°C to +60°C

Physical and Environmental

- Unit size 310 W x 172 D x 43 H mm
- Unit weight 2.4 kg
- Conformal coating option

GW7600 Series Models and RF Band Options

GW7600 Series Models															
Model	ADSL2+	ETH	3G	LTE	CDMA 450	WiFi	Dual Radio	V.92 Modem	ISDN BRI	Quad BRI	Quad Serial	Sync Serial	Leased Line	E1/T1	Pseudowire
GW7602		4				●		●	●	●	●	●	●	●	●
GW7610	1	4				●		●	●	●	●	●	●	●	●
GW7630	1	4	✓			●	●	●	●	●	●	●	●	●	●
GW7640	1	4		✓		●	●	●	●	●	●	●	●	●	●
GW7650	1	4			✓	●	●	●	●	●	●	●	●	●	●

● = optional There are two option slots: one supports ISDN, V.92 dial modem or leased line; the other supports quad serial, sync serial or E1/T1.

The dual radio option can be LTE, 3G, or CDMA450. MOQ of 500 applies for the quad ISDN and quad serial options.

RF Band Options							
RF Band	Region	2G Bands	3G Bands	LTE Bands	LTE Category	Operating Temp	Order Code
A	Europe China	850/900/1800 1900	900/2100	-	-	-40°C to 70°C	-RFA
B	Europe Asia	850/900/1800 1900	850/900/1900/2100	-	-	-40°C to 70°C	-RFB
C	Europe Asia	850/900/1800 1900	850/900/1900/2100	B1/B2/B3/B5/B7/B8/B20	-	-30°C to 70°C	-RFC
D	Worldwide	-	-	B3/B7/B20/B31	-	-20°C to 60°C	-RFD
E	Europe	900/1800	900/2100	B1/B3/B7/B8/B20/B38/B40	3	-30°C to 70°C	-RFE
F	Worldwide	-	CDMA TX 452.500 ~ 457.475 RX 462.000 ~ 467.475	-	-	-20°C to 60°C	-RFF
G	Worldwide	850/900/1800 1900	850/900/2100	B1/B3/B5/B7/B20	-	-40°C to 70°C	-RFG
J	Worldwide	450	-	-	-	-40°C to 70°C	-RFJ
L	Europe APAC	900/1800	900/2100	-	-	-40°C to 70°C	-RFL
M	North America	-	850/1900	B2/B4/B5/B17	-	-30°C to 70°C	-RFM
N	Worldwide	-	850/900/1700/1800 1900/2100	B1/B2/B3/B4/B5/B7/B12/B13 B20/B25/B26/B29/B30/B41	-	-40°C to 70°C	-RFN
P	Australia New Zealand Latin America Taiwan	850/900/1800 1900	850/900/1900/2100	B1/B2/B3/B4/B5/B7/B8 B28/B40	4	-40°C to 70°C	-RFP
Q	Mexico/USA Canada	-	850/1900	B1/B2/B4/B5/B12/B13	4	-40°C to 70°C	-RFQ
Q1	Mexico/USA Canada	-	850/1900	B1/B2/B4/B5/B12/B13	1	-40°C to 70°C	-RFQ1
R	EMEA/Korea Thailand Indonesia	900/1800	850/900/2100	B1/B3/B5/B7/B8/B20/B38 B40/B41	4	-40°C to 70°C	-RFR
R1	EMEA/Korea Thailand	900/1800	850/900/2100	B1/B3/B5/B7/B8/B20	1	-40°C to 70°C	-RFR1
S	Europe	900/1800	850/900/2100	B1/B3/B5/B7/B8/B20/B38 B40/B41	4	-40°C to 70°C	-RFS
T	Asia/Pacific	900/1800	800/850/900/1700/2100	B1/B3/B5/B7/B8/B18/B19/B21 B28/B38/B39/B40/	6	-40°C to 70°C	-RFT
U	EMEA/North America/Latin America/APAC/ Japan/Australia	-	800/850/900/ 2100/1900/1800/1700	B1/B2/B3/B5/B7/B8/B18/B19/B21 B25/B26/B38/B39/B40/B41/B66	6	-40°C to 70°C	-RFU
X	Australia	-	850/2100	B1/B3/B5/B7/B28	4	-40°C to 70°C	-RFX
X1	Australia	-	850/2100	B1/B3/B5/B7/B28	1	-40°C to 70°C	-RFX1