

BiPAC 9800NL

Fibre Wireless-N Router

The BiPAC 9800NL is a point-to-point (Active Ethernet) Fibre Optical Gateway with unique Small Form Factor Pluggable (SFP) interface that can support 100/1000Base auto-sensed connectivity in a box. With an integrated 802.11n wireless access point and 4-port Gigabit Ethernet LAN ports, the gateway enables faster wireless speeds of up to 300Mbps and LAN connection 10 times faster than regular 10/100Mbps Ethernet LAN. It also provides a unique Management Center, enabling users to monitor bandwidth, download speed, and much more.

With WAN throughput in excess of 900Mbps, BiPAC 9800NL is designed for home and office environment extending reliable, high-speed, and long-reach last-mile connectivity to people living and working building. Furthermore, the BiPAC 9800NL supports remote management which facilitate FTTH service provider deliver more efficient management. The gateway leverages the extraordinary bandwidth to deliver high-speed Internet applications to home and office users. The full-featured fibre router providing is an ideal solution for FTTH deployments.

FTTH Applications

The BiPAC 9800NL can be used for a point-to-point fibre access network. Since the Fibre WAN interface allows faster rates over even longer distances, it can support Telcom operators or ISPs to provide high quality and reliable Internet broadband services to either business users or home users. The 4-port Gigabit Switch incorporated into the BiPAC 9800NL enables blistering LAN transfer rates for multimedia applications such as interactive gaming, IPTV video streaming and real-time audio.

Wireless Mobility and Security

With an integrated 802.11n Wireless Access Point, the router delivers up to 3 times the wireless coverage of a 802.11b/g network device, so that wireless access is available everywhere in the house or office. If your network requires wider coverage, the built-in Wireless Distribution System (WDS) allows you to expand your wireless network without additional wires or cables. The BiPAC 9800NL also supports the Wi-Fi Protected Setup (WPS) standard and allows users to establish a secure wireless network just by pressing a button. Multiple SSIDs allow users to access different networks through a single access point. Network managers can assign different policies and functions for each SSID, increasing the flexibility and efficiency of the network infrastructure.

The Extra Gigabit Ethernet WAN

The BiPAC 9800NL uses an extra Gigabit Ethernet WAN port provides users an alternative means to connect to cable modems, fibre optic lines, PON besides or VDSL2 / ADSL2+ for internet connection. This alternative provides users with more flexibility and a faster way to get online.

IPv6 Ready - Pathway to the Future

The BiPAC 9800NL fully supports IPv6 (Internet Protocol Version 6), launched as the current IPv4 range is filling up, and IPv6 is gradually becoming the indispensable addressing system for savvy cloud computing users. Dual stack means the router is capable of running IPv4 and IPv6 in parallel during the transition period. With Billion IPv6 enabled devices, three major transition mechanisms such as Dual-Stack, Dual-Stack Lite, and 6RD (IPv6 rapid deployment) are supported to be adapted easily into service provider's IPv4/IPv6 network.¹



- WAN interface supports up to 1000 Mbps downstream and upstream wire-speed (over 900Mbps) rates
- SFP interface supports 100/1000Base auto-sensing Fibre connectivity
- Extra RJ-45 Ethernet WAN (EWAM) port for connecting to ADSL/VDSL/Cable/Fibre modem device
- 4-port Gigabit LAN switch
- Auto failover feature to ensure an always-on connectivity
- 802.11n wireless AP with high-speed wireless connection up to 300Mbps data rate
- Supports Wi-Fi Protected Setup (WPS) and WPA-PSK/WPA2-PSK
- IPv6 ready (IPv4/IPv6 dual stack)
- QoS for traffic prioritization and bandwidth management
- Supports IPTV Applications^{*2}
- Usage for triple play services – stable operation 24/7 without rebooting
- Firewall with well known applications setup

Features & Specifications

Network Protocols and Features

- IPv4, IPv6, IPv4/IPv6 dual stack
- Dual-Stack Lite and 6RD (IPv6 rapid deployment)
- NAT, static routing and RIP v1/v2
- Dual WAN failover and failback
- Virtual server and DMZ
- SNTP, DNS proxy
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- IGMP proxy and IGMP snooping
- MLD proxy and MLD snooping
- Transparent Bridging (IEEE 802.1D)
- Port forwarding
- Service based tagging (SBT)
- Supporting QoS (IEEE 802.1p)
- IP routing/static routing
- DDNS client & relay
- PPPoE pass-through
- DHCP client, server & relay (RFC 2131)
- Service port mapping
- NAT (RFC 3022) basic Firewall support
- Bandwidth reservation

WAN Protocol

- DHCP Client
- Static IP
- PPPoE

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access control
- IP filtering, MAC filtering, URL filtering
- Password protection for system management
- VPN pass-through
- Prevent DoS attacking including IP Spoofing, Land Attack, Smurf Attack, Ping of Death, TCP SYN Flooding

Notes:

1. Future release and only upon request for Telco/ ISP tender projects.
2. IPTV application may require subscription to IPTV services from a Telco/ISP.
3. Only upon request for Telco/ ISP tender projects.
4. Specifications in this datasheet are subject to change without prior notice.

IPTV Applications^{*2}

- IGMP proxy and IGMP snooping
- MLD proxy and MLD snooping
- Virtual LAN (VLAN)
- Quality of Service (QoS)

Wireless LAN

- Compliant with IEEE 802.11n, 802.11g and 802.11b standards
- 2.4GHz - 2.484GHz frequency range
- Up to 300Mbps wireless operation rate
- 64/128 bits WEP supported for encryption
- WPS (Wi-Fi Protected Setup) for easy setup
- Wireless security with WPA-PSK/WPA2-PSK
- Multiple wireless SSIDs with wireless guest access and client isolation
- Supports WDS repeater function

Management

- Easy Sign-On (EZSO)
- Quick installation wizard
- Web-based GUI for remote and local management
- Firmware upgrades and configuration data upload and download via web-based GUI
- Supports DHCP server/client/relay (WAN port)
- TR-069³ (CWMP) supports remote management – including TR-098, TR-104 and TR-106
- Supports SNMP
- Telnet for local and remote management

Hardware Specifications

Physical Interface

- WAN: 100/1000BASE SFP cage
- EWAN: RJ-45 Gigabit Ethernet port for connecting to ADSL/Cable/VDSL/Fibre modem device
- Ethernet LAN: 4-port 10/100/1000Mbps auto-crossover (MDI/ MDI-X) switch
- WLAN: 2 detachable antennas
- Factory default reset button
- Wireless on/off and WPS push button
- Power jack
- Power switch

Physical Specifications

- Dimensions: 9.04" x 6.10" x 1.46"
(229.5 mm x 155 mm x 37 mm)

Power Requirements

- Input: 12V DC, 1.5A
- Local DC power with external AC adapter for 220V/50Hz euro jack

LED

- LAN port activity LED
- WAN port sync state LED
- WiFi indication LED
- Power on/of LED
- Internet/PPPoE status LED

Operating Environment

- Operating temperature: 0°C ~ 40 °C
- Storage temperature: -20°C ~ 70 °C
- Humidity: 20% - 95% non-condensing
- Complied with RoHS and CE