PRODUCT DATA SHEET

1GE + WIFI GPON ONT

Overview

To deliver triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application, the GPON RGU (Residential Gateway Unit) NTFGN-01GS-W incorporates interoperability, key customers' specific requirements and cost-efficiency.

Equipped with ITU-T G.984 compliant 2.5G Downstream and 1.25G Upstream GPON interface, NTFGN-01GS-W supports the full Triple Play of services including voice and high speed internet access service.

Compliant with standard OMCI definition, NTFGN-01GS-W is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance

Ordering information

Product	10/100/1000 Base-T Interface	Wi-Fi Interface
NTFGN-01GS-W	1	1

Dimensions
- 210mm x 170mm x 38mm (W x D x H)
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Power Supply
- +12V (feed via external AC/DC adapter)
- 2-PIN power adaptor input
- Dying Gasp support
- One power switch
- Power consumption: less than 10W

Working Environment
- Temperature: 0℃ ~ 55℃
- Humidity: 5% ~ 95% relative humidity

Safety & EMI
- CE certificate

Installation
- Desktop mounting & wall mounting

RoHS compliant

GPON Interface

- Compliant with ITU-T G.984 GPON standards
- SFF type laser, SC/APC connector
- 1.244 Gbps Burst Mode Upstream Transmitter
- 2.488 Gbps Downstream Receiver
- Compliant with ITU-T G.984.2 Amd1, Class B+
- Wavelengths: US 1310nm, DS 1490nm
- 0.5dBm ~+5dBm launch power, -27dBm sensitivity, and -8dBm overload
- Laser compliant with FCC 47 CFR Part 15, Class B, and FDA 21 CFR 1040.10 and 1040.11, Class I, ONT support Class C or Class C+ optics as an option
- Support G.984.5 Blocking Filter as an option
- Multiple T-CONTs per device
- Multiple GEM Ports per device
- Flexible mapping between GEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction) in both directions
- DBA reporting by piggyback reports in the DBRu (mode 0 and mode 1)
- 802.1p mapper service profile on U/S
- Mapping of GEM Ports into a T-CONT with priority queues based scheduling
- Support Multicast GEM port and incidental broadcast GEM port.

Ethernet Interface

- 10/100/1000 Base-T interface with RJ-45 connectors
- Ethernet port auto negotiation or manual configuration
- MDI/MDIX automatically sense
- Hardware priority queues on the downstream direction in support of CoS
- 802.1D bridging
- VLAN tagging/detagging per Ethernet port
- VLAN stacking (Q-in-Q) and VLAN Translation
- IP ToS/DSCP to 802.1p mapping
- Class of Service based on UNI, VLAN-ID, 802.1p bit, and combination
- Marking/remarking of 802.1p
- GMP v2/v3 snooping and IGMP snooping with proxy report
- Broadcast/Multicast rate limiting

Gateway Features

- Multiple WAN interfaces supporting
- WAN connection
  - Point-to-Point Protocol over Ethernet (PPPoE)
  - Dynamic Host Configuration Protocol (DHCP)
  - Static
- DHCP server for LAN devices
- DNS relay
- Network Address Translation (NAT) / Network Address Port Translation (NAPT)
- Port forwarding
- Static routing
- Traffic classification and QoS based on Layer 3 and Layer 4 Identifier
- Access Control List (ACL)
- VPN Pass thru for Point to Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP) and IP Security Protocol (IPSec)
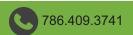
RoHS compliant

- Firewall
- Application Layer Gateway (ALG)
- Demilitarized Zone (DMZ)
- Dynamic Domain Name Server (DDNS)
- Network Time Protocol (NTP)
- Universal Plug and Play (uPnP)
- IGMP proxy
- IPv6
  - Stateless Address Autoconfiguration (SLAAC)
  - DHCPv6
  - PPPoEv6
  - DNSv6

WLAN Interface
- Compliant with IEEE 802.11 b/g/n
- IEEE 802.11n 2.4GHz
- 64 and 128 bit Wireless Encryption Protocol (WEP) support
- Wireless Protected Access support including Pre Shared Key (WPA-PSK)
- Radio switched on/off function Support WPS
- Transmitter power:
- IEEE 802.11b: 18dBm
- IEEE 802.11g: 15dBm
- IEEE 802.11g/n: HT20 14dBm
- IEEE 802.11g/n: HT40 14dBm
- ERIP: ≤20 dBm
- Antenna: 3dB

LED
- PWR
- REG
- LOS
- LAN
- Wifi

OAM
- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988
- Compliant to TR-069
- Provisioning all kinds of services including Ethernet, RF and VoIP, etc. by subset of TR-098 and TR-104
- Provision RF service over OMCI
- Alarming and AVC report, performance monitoring
- Remotely software image download over OMCI, as well as activation and rebooting
- Hold two software sets with software image integrity checking and automatic rollback
- Provisioning all kinds of services including Ethernet, RF and VoIP, etc. by subset of TR-098 and TR-104