

PRODUCT DATA SHEET

4GE +WIFI+CATV GPON ONT

Description

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-04GS-TW 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-04GS-TW supports the full Triple Play of services including voice, video, and high speed internet access service. Compliant with standard OMCI definition, NTFGN-04GS-TW is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.



Features

ITU-T G.984.x compliant GPON ONT
1 GPON port, 4 10/100Base-T Ethernet interface, 1 RF Video interface and WIFI supported.
4K VLAN, 1K MAC table
Plastic shell for indoor installation
Powerful QOS abilities

Interface

Product	10/100/1000Base-T interface	Wi-Fi interface	USB interface	RF Video interface
NTFGN-04GS-TW	4	1	1	1

Dimensions

228mm x176m x41mm (W x D x H)

Power Supply

+12V (feed via external AC/DC adapter)
2-PIN power adaptor input
Dying Gasp support
Power switch
Power Consumption: less than 18W

Working Environment

Temperature: 0 ~ 40
Humidity: 5% ~ 95% relative humidity

Safety & EMI

CE certificate

Installation

Desktop mounting



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

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Compliant with ITU-T G.984.2 Amd1, Class B+

0.5dBm ~+5dBm launch power, -27dBm sensitivity, and -8dBm overload

Wavelengths: US 1310nm, DS 1490nm

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 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

Virtual switch based on 802.1q VLAN

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, ToS/DSCP

Marking/remarking of 802.1p

IGMP v2/v3 snooping

Broadcast/Multicast rate limiting

Gateway Features

Multiple WAN interfaces supporting



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)
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

CATV Features

Standard F-Type connector
Analog RF video over dedicated 1550nm wavelength
RF output level of +17 dBmV
RF Passband: 47 MHz~ 1000MHz
Optionally remote band control function:

- Basic services: 47MHz - 870MHz
- Premium services: 47MHz - 1000MHz, pass or block, software provisionable

Switched on/off by remote control

WLAN Interface

Compliant with IEEE 802.11 b/g/n
2.4GHz
MIMO:2x2
Multiple SSIDs
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



OAM

Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.984.4 and G.983.2

Compliant to TR-069

Provisioning all kinds of services including Ethernet, WLAN and VoIP, etc. by subset of TR-098 and TR-104

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

