OPTICAL NETWORK UNIT (ONU)

ONU 2004i

COST EFFECTIVE GEAPON CUSTOMER PREMISE DEVICE
WITH 3 10/100BASE-T PORTS AND 1 10/100/1000M
BASE-T PORT

KEY FEATURES

- FULL IEEE 802.3/802.3AH COMPLIANCE
- RX SENSITIVITY OF -25.5 DBM
- TX POWER OF -1 TO +4 DBM
- PLUG AND PLAY FUNCTIONALITY
- ADVANCED L2 FUNCTIONALITY
- ADVANCED QUALITY OF SERVICE (QOS) SUPPORT ENABLE
- SLA BASED BILLING
- IGMP SNOOPING SUPPORT
- PER PORT INGRESS RATE LIMIT
- REMOTE MANAGEMENT

NEC ONU 2004i is a cost-effective GEAPON customer premise device designed for indoor residential and Single Office/Home Office (SOHO) installation. It supplies Gigabit broadband service to a connected subscriber’s gateway and/or computers. ONU 2004i provides three 10/100M Base-T Ethernet ports and one 10/100/1000 Base-T Ethernet Port with advanced L2 functionality for Data and IPTV video services. The ONU 2004i is configured and managed remotely via NEC’s ME product family (OLT).

APPLICATIONS

ONU2004i is suited for residential and SOHO market segments. It provides an uplink to the central office through its GEAPON port, and a downlink to the individual residential user or SOHO through four Ethernet ports. It provides comprehensive L2 switching, QoS and Security Features for SOHO Applications. A future-proof cost effective solution enabling FTTx, ONU 2004i delivers high rate data and IPTV over a single fiber.
Technical Specifications

STANDARDS
- IEEE 802.3ah

OPTICAL CHARACTERISTICS
- Optical Fiber: Single SMF fiber
- Connector type: SC/UPC connector
- Max split: 32
- Data rate: 1 Gbps up and down stream
- Operation Tx wavelength: 1310 nm
- Operation Rx wavelength: 1490 nm
- Output Power: -1~ +4 dBm
- Receiver Sensitivity: -25.5dBm
- Receiver Saturation: -3dBm

L2 CAPABILITIES
- IEEE 802.1q Port based VLANs
- MAC Address Management
- STP support
- Per port ingress rate limiting
- IEEE 802.3x Flow Control
- IGMP Snooping: 16 address per LAN port

QoS CAPABILITIES
- IEEE 802.1p, IPv4 ToS and Diffserv
- Traffic Classification based on MAC, LAN Port and VLAN ID
- Traffic IEEE 802.1p Remarking
- 4 egress queues for LAN and WAN port
- SP/WRR/SP+WRR Scheduling

SECURITY
- LAN port isolation
- Broadcast, Multicast, DLF storm prevention
- MAC address filtering / limit

MANAGEMENT
- Remote Management through OLT, SNTP, SNMPv2
- Remote firmware upgrade
- CLI based management
- DHCP client with option 60/option 43 for management

FRONT INTERFACE
- POWER – LED indication of power status
- LAN1 to LAN4-LED indication of FE1-4 link operation status
- GEPON-LED indication of PON link operational status
- ALARM-LED indication of module alarm status

REAR INTERFACES
- 1 power connector
- 3 RJ-45 10/100M Ethernet
- 1 RJ-45 for 10/100/1000M Ethernet
- 1 GEPON SC connector
- 1 Reset button for factory default setting

HARDWARE

DIMENSION
- (H x W x D) 38mm x 226mm x 152mm
WEIGHT
- 0.490 kg
MTBF
- 628,926 hours

POWER CONSUMPTION
- External power supply with 100-240V AC input & 12V DC/1A output
- 10W Max, 6Watts average

ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE
- 0°C to +40°C
RELATIVE HUMIDITY
- 5% to 90% non condensing

STORAGE TEMPERATURE
- -40 to +75°C

STORAGE HUMIDITY
- 75% (maximum)

STANDARDS AND REGULATORY COMPLIANCE CERTIFICATIONS
- CE, ROHS6, CCC

Safety Precautions
*Before installing, connection or using this product, be sure to carefully read and observe the cautionary and prohibited matters provided in the instruction manual.

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