Empowered by Innovation

NEC

OPTICAL NETWORK UNIT (ONU)

ONU 404i

COST EFFECTIVE GEPON CUSTOMER PREMISE DEVICE WITH LIVELINE SUPPORT, INTEGRATED VOIP AND 10/100M BASE-T 4-PORT SWITCH

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

ADVANCED L2 FUNCTIONALITY

ADVANCED QUALITY OF SERVICE (QOS) SUPPORT ENABLE SLA BASED BILLING

IGMP SNOOPING SUPPORT

INTEGRTAED VOIP FUNTIONALITY

MGCP AND SIP VOIP SUPPORT

PER PORT INGRESS RATE LIMIT

REMOTE MANAGEMENT

NEC ONU 404i is a cost-effective GEPON customer premise device designed for indoor residential and Single Office/Home Office (SOHO) installation. It supplies Gigabit broadband service to a connected subscribers gateway and/or computers. ONU 404i provides four 10/100M Base-T Ethernet ports with advanced L2 functionality for Data and IPTV video services.

ONU 404i also provides two FXS Voice over IP (VoIP) ports and one lifeline (FXO) port for voice communications. In typical CPE devices, VoIP communications are provided via VoIP protocol by way of FXS ports. However, unlike traditional VoIP equipment, when the ONU 404i is powered off, an active Lifeline port remains enabled and traditional PSTN service is delivered. The ONU 404i is configured and managed remotely via NEC's ME product family (OLT).

Applications

ONU404i is suited for residential and SOHO market segments. It provides an uplink to the central office through its GEPON port, and a downlink to the individual residential user or SOHO through four Ethernet ports, two VoIP ports and one lifeline port. A future-proof solution enabling FTTx, ONU 404i delivers voice, 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

L2 CAPABILITIES
• IEEE 802.1q Port based 256 VLANs
• MAC Address Management, 8K MAC addresses
• STP support
• Per port ingress rate limiting
• IEEE 802.3x Flow Control
• IGMP Snooping: 16 address per LAN port

L3 CAPABILITIES

• DHCP Server and Client
• NAPT (RFC 1631)
• ALG for VoIP, Data and Internet application
• PPPoE Client

QoS CAPABILITIES

• IEEE 802.1p and DSCP
• 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

VOICE FUNCTION

• 2*FXS(RJ11) for VOIP phone
• 1*FXO(RJ11) for lifeline when ONU is powered down
• VoIP protocol: MGCP and SIP
• VoIP codes:G.711,G7.29a,G.168,RFC2833 (DTMF Relay)
• FAX: T.38
• VAD and CNG.G168 Echo Cancellation

MANAGEMENT
• Remote Management through OLT, SNTP, SNMPv2
• Remote firmware upgrade
• WEB based 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 statu

REAR INTERFACES
• 1 power connector
• 4RJ-45 10/100M Ethernet
• 3RJ-11 for voice
• 1 GEPON SC connector
• 1 Reset button for factory defaults setting

HARDWARE
DIMENSION

• (H x W x D) 38mm x 226mm x 152mm

WEIGHT
• 0.536 kg

MTBF
• 416,202 hours

POWER CONSUMPTION
• External power supply with 100-240V AC input & 12V DC/2A output
• 12W Max, 6 Watts average
• UPS interface

ENVIRONMENTAL SPECIFICATIONS
OPERATING TEMPERATURE
• 0ºC to +40º C

RELATIVE HUMIDITY
• 5% to 90% non condensing

STORAGE TEMPERATURE

• –40 to +75º 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.

For inquiries, contact :