

# ONU 2004

## COST-EFFECTIVE GEPON CUSTOMER PREMISE DEVICE

DELIVERS HIGH SPEED VOICE, DATA AND VIDEO SERVICES OVER  
GIGABIT ETHERNET PASSIVE OPTICAL NETWORKS (GEPON)



### KEY FEATURES:

- **FULL IEEE 802.3/802.3ah COMPLIANCE**
- **HIGHEST SPEED PON**
- **PLUG-AND-PLAY**
- **ADVANCED QOS AND L2 FUNCTIONALITY**
- **REMOTE MANAGEMENT**
- **IGMP SNOOPING**

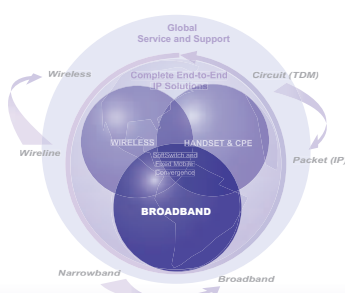
The UTStarcom ONU 2004 module is a cost-effective GEPON customer premise device. It is designed for indoor residential and Small Office/Home Office (SOHO) installation. It supplies Gigabit broadband service to a connected subscriber's gateway and/or computers. ONU 2004 provides three 10/100M Base-T Ethernet interfaces and one 10/100/1000M Base-T Ethernet interface with advanced L2 functionality for data and IPTV video service delivery. The ONU 2004 is configured and managed remotely via UTStarcom's BBS family (OLT).

### APPLICATIONS

ONU 2004 receives 1490nm digital signal, and transmits 1310nm digital signal upstream. It provides an uplink to the central office through its GEPON port, and a downlink to the individual residential user through its Ethernet port. A future-proof FTTx solution, ONU 2004 delivers voice, high bit-rate data and video over a single fiber.

### KEY FEATURES

- Full IEEE 802.3/802.3ah compliance
- Single fiber for Data, IPTV communications
- Highest speed PON: 1 Gbit/s symmetrical for data, VoIP and IP video services
- "Plug-and-play" via auto-discovery and configuration
- Advanced QoS functions enable billing by Service Level Agreement
- Remote management with advanced OAM functions
- Advanced L2 functionality: IGMP snooping, VLAN MAC management, Rate limit, STP
- Low input optical power
- Low EMI and certified ESD protection



# Technical Specifications



## HARDWARE

### PHYSICAL

Dimensions: 152(W) x 226 mm (H) x 38mm (D)  
Weight: around 490g

### POWER

12V DC or 5V DC  
10W Maximum

### OPERATING REQUIREMENTS

Temperature: 0 ~ 40 °C  
Humidity: 5% ~ 90 %

### MODULE FUNCTIONS

#### PON STANDARDS

IEEE 802.3ah

#### L2 SWITCH FUNCTION

IEEE 802.1q VLAN  
MAC management  
IGMP snooping  
IEEE 802.1d STP IEEE 802.1d STP  
Rate Limiting

#### QoS

IEEE 802.1p  
IPv4 TOS priority  
Differsrv

#### MANAGEMENT

Telnet, Remote system software upgrade, EMS through OLT

#### FRONT INTERFACE

LEDs: Power, Alarm, 4\* LAN Link Status and 1\*PON Link Status

#### REAR INTERFACE

1 Power connector  
1 GEAPON SC connector  
4 RF-45 Ethernet port (3\*FE+1\*GE)

## CERTIFICATIONS

VCCI, CE, UL and FCC part 15B

### OPTICAL CHARACTERISTICS

Optical Fiber: Single SMF fiber  
Connector type: SC/UPC connector  
Max split: 32  
Data rate: 1 Gbps up and down stream  
Optical loss budget: 29dB  
Max Reach: 20Km  
Operation wavelength range:  
Upstream: 1310 nm  
Downstream: 1490 nm  
Output power @ 1310nm: -1dBm ~ +3dBm  
Receiver sensitivity @ 1490nm: <-26dBm  
Receiver saturation @ 1490nm: -3dBm

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#### About UTStarcom, Inc.

UTStarcom is a global leader in IP-based, end-to-end networking solutions and international service and support. The company sells its broadband, wireless, and handset solutions to operators in both emerging and established telecommunications markets around the world. UTStarcom enables its customers to rapidly deploy revenue-generating access services using their existing infrastructure, while providing a migration path to cost-efficient, end-to-end IP networks. Founded in 1991 and headquartered in Alameda, California, the company has research and design operations in the United States, China, Korea and India. UTStarcom is a FORTUNE 1000 company. For more information about UTStarcom, visit the company's Web site at [www.utstar.com](http://www.utstar.com)

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