

ONU 301

COST-EFFECTIVE GEAPON CUSTOMER PREMISE DEVICE

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



KEY FEATURES:

- **FULL IEEE 802.3/802.3AH COMPLIANCE**
- **HIGHEST SPEED EPON**
- **SINGLE FIBER FOR ETHERNET AND CATV RECEIVER**
- **PLUG-AND-PLAY**
- **ADVANCED QOS**
- **REMOTE MANAGEMENT**
- **IGMP SNOOPING**

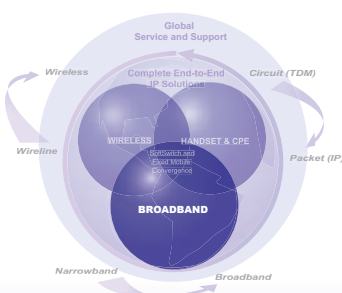
The UTStarcom ONU 301 is a cost-effective GEAPON customer premise device designed for indoor residential installation. It supplies Gigabit broadband service to a connected subscriber's gateway and/or computers. ONU 301 provides one "F" type RF connector for CATV video, which covers the 47MHz -870 MHz frequency range. ONU 301 also provides a 10/100Base-T Ethernet interface for data communication. ONU 301 is configured and managed remotely via UTStarcom's BBS family (OLT).

APPLICATIONS

ONU 301 receives a 1490nm digital signal, and 1550nm video optical signal downstream, and transmits a 1310nm digital signal upstream. It provides an uplink to the central office through its GEAPON port, and a downlink to the individual residential user through its "F" type RF interface and Ethernet port. A future-proof solution enabling FTTx, ONU 301 delivers voice, high bit-rate data and video over a single fiber.

FEATURES

- Full IEEE 802.3/802.3ah compliance
- Single fiber for Ethernet and CATV receiver
- 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
- Power on/off LED, Normal, lower, and overload indication LEDs
- IGMP Snooping
- Cost-effective solution for video combines ONU with Transceiver
- Low input optical power
- Low EMI and certified ESD protection



HARDWARE

PHYSICAL

Dimensions: 154(W) x 194 mm (H) x 38mm (D)
Weight: 535g

POWER

12V DC
10W Maximum

OPERATING REQUIREMENTS

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

MODULE

PON STANDARDS

IEEE 802.3ah

USER AUTHENTICATION

IEEE 802.1x

OoS

IEEE 802.1p

MANAGEMENT

Telnet, Remote system software upgrade, EMS through OLT

RF CHARACTERISTICS

Connector: 75 W, F type (CATV connection)
Output Level (per channel): >15 dBmV, with level tilted up 2.5dB
Bandwidth: 47MHz ~ 870 MHz
Drive capability: 4 TV sets
CSO > 55dB
CTB > 55dB

Carrier-to-Noise (CNR) level:

- 1) 30 dB @ -10dBm optical input for QAM 64, 40 channels
- 2) 34 dB @ -10dBm optical input for QAM 256, 40 channels
- 3) 45 dB @ -10dBm optical input for typical 50 analog channels

FRONT INTERFACE

LEDs: Power, Alarm, LAN Link Status and PON Link Status

REAR INTERFACE

1 Power connector
1 GEAPON SC connector
1 RJ -45 10/100M Ethernet
1 "F" Type RF interface

CERTIFICATIONS

VCCI, CE, CCC, UL and FCC part 15B

OPTICAL CHARACTERISTICS

Optical Fiber: Single SMF fiber
Connector type: SC/APC connector
Max split: 32
Data rate: 1 Gbps up and down stream
Optical loss budget: 29dB
Operation wavelength range: Upstream: 1310 nm
Downstream: 1490 nm
Video receiver sensitivity: -9dBm ~ +2dBm @ 1550nm
Output power @ 1310nm: -1dBm ~ +3dBm
Receiver sensitivity @ 1490nm: <-26dBm
Receiver saturation @ 1490nm: -3dBm
Return loss (S11): >35 dB
Isolation: >36 dB

Please note the information contained herein is for informational purposes only. Technical claims listed depend on a series of technical assumptions. Your experience with these products may differ if you operate the products in an environment, which is different from the technical assumptions. UTStarcom reserves the right to modify these specifications without prior notice. UTStarcom makes no warranties, express or implied, on the information contained in this document.

UTStarcom, Inc. USA

1275 Harbor Bay Parkway
Alameda, CA 94502, USA
Tel: 510-864-8800
Fax: 510-864-8802

www.utstar.com

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

Copyright © 2005 UTStarcom, Inc. All Rights Reserved. UTStarcom is a registered trademark and the UTStarcom logo and A World of Better Communication are trademarks of UTStarcom, Inc. and its subsidiaries.