

BEAM GE-PON ONT

C501K

User Guide



Introduction

BEAM's GE-PON C501K adopts the state of the art GE-PON technology allowing subscribers to share the data of 1.25Gbps with single fiber optic through a passive optical distribution network. We will now be able to deliver the gigabit access services to the subscribers.

C501K, installed in an apartment or a house, is connected to the IP terminal devices, such as subscriber's PC or router and provides the high speed Internet of up to 1000Mbps per subscriber.

With this innovative technology, C501K supports various functions exceeding those of the existing Ethernet switches, such as Quality of Service (QoS) function, management function that allows to take prompt actions against the problems with the system and a subscriber line, security function that secures subscriber information.

C501K supports 1 10/100/1000 base-T port for the subscriber interface and a GE-PON interface that is connected to BEAM OLT through splitters.

Welcome to the world of Gigabit Speeds!

Contents of the Package



C501K



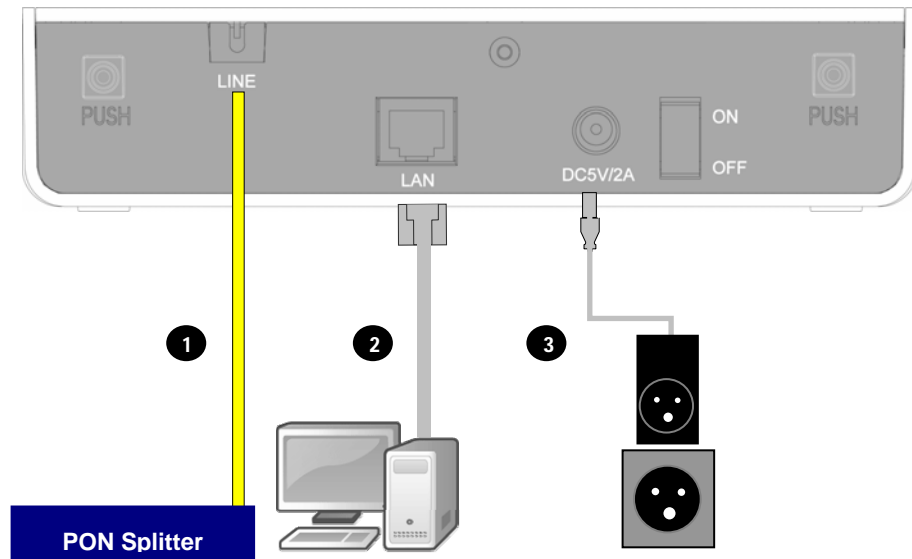
Power Adaptor



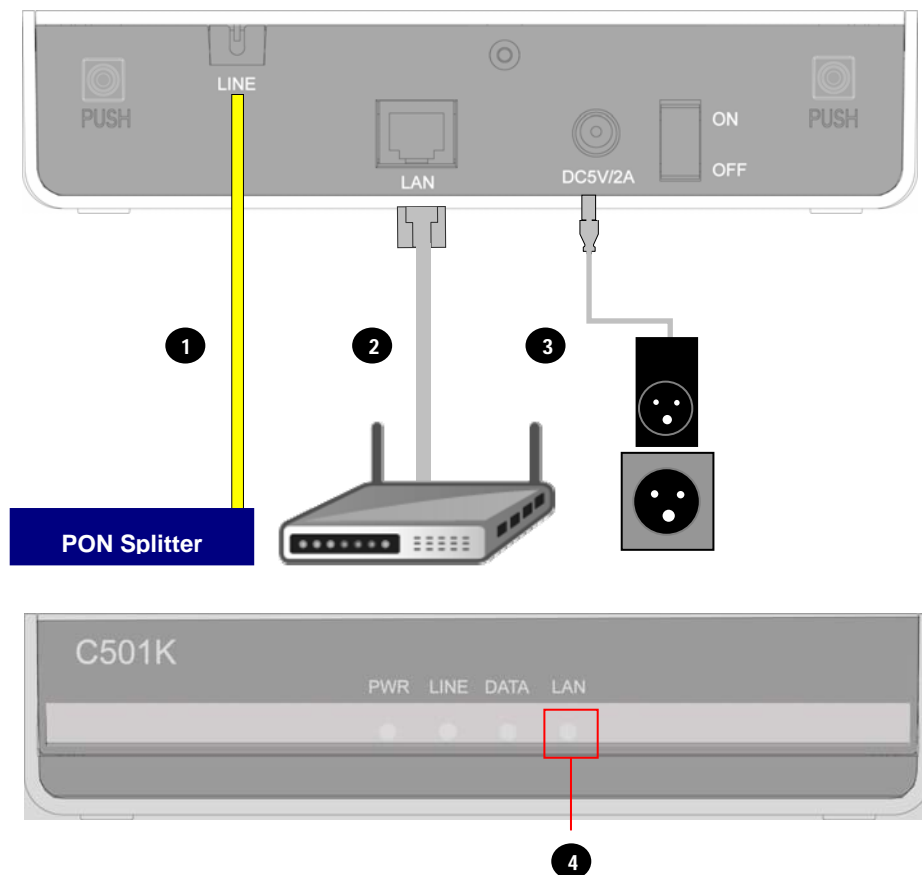
User Guide

Connectivity Diagram:

In Case of a Single Computer



In Case of Router for multiple PCs



Caution

Ensure that the C501K is turned ON only after the connections are made as stated above

Getting started

1. Insert the SC/UPC connector on the side of a yellow single-mode optical fiber into the optical terminal of the optical outlet and the other connector into the PON port of C501K by pushing them until you hear a clicking sound.
2. Insert one side of the RJ-45 connector of a UTP cable into LAN port of C501K and the other side into the RJ-45 port of the LAN card on the PC by pushing them until you hear a clicking sound.
3. Connect the 220V AC input terminal and the output terminal of the power adaptor to the power socket and the DC 5V socket of C501K, respectively, and then turn on the power switch. The Power (PWR) LED on the front of C501K should be turned on.
4. If everything is installed properly, the user can see the applicable Computer (LAN) LED blink while data is sent/received.



Warning



Invisible laser radiation may be emitted from disconnected fibers or connectors. Do not stare into beams or view directly with optical instruments.

System Architecture

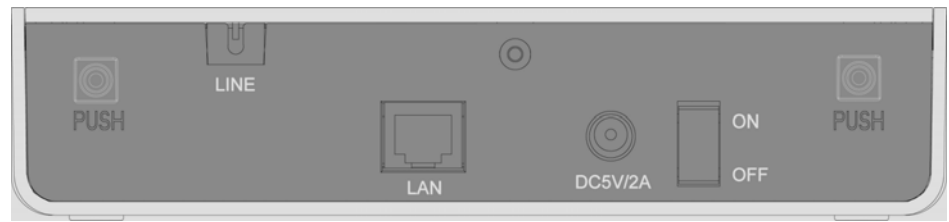
Front Panel



LED

Name	Color	Status	Function	Actions to take
PWR	GREEN	ON	Power ON	
		OFF	Power OFF	Check Power switch at the back panel-> Power adapter & power outlet
LINE	GREEN	ON	BEAM Link Up (Normal)	Normal Operation
		BLINK (Every 1 sec)	BEAM Link Down. Optic signal ON	Call BEAM
	RED	ON	Optical signal OFF(Optical level exceeded threshold)	Call BEAM
	ORANGE	ON	BEAM Link Up but optical signal is very low	Call BEAM
DATA	GREEN	OFF	No Data transmitting/receiving	Call BEAM
		BLINK	Transmitting/receiving Data	Normal Operation
LAN	GREEN	ON	Ethernet Link Up	Normal Operation
		BLINK	Transmitting/Receiving Ethernet data	Normal Operation
		OFF	Ethernet Link Down	Check cable at PC/Router

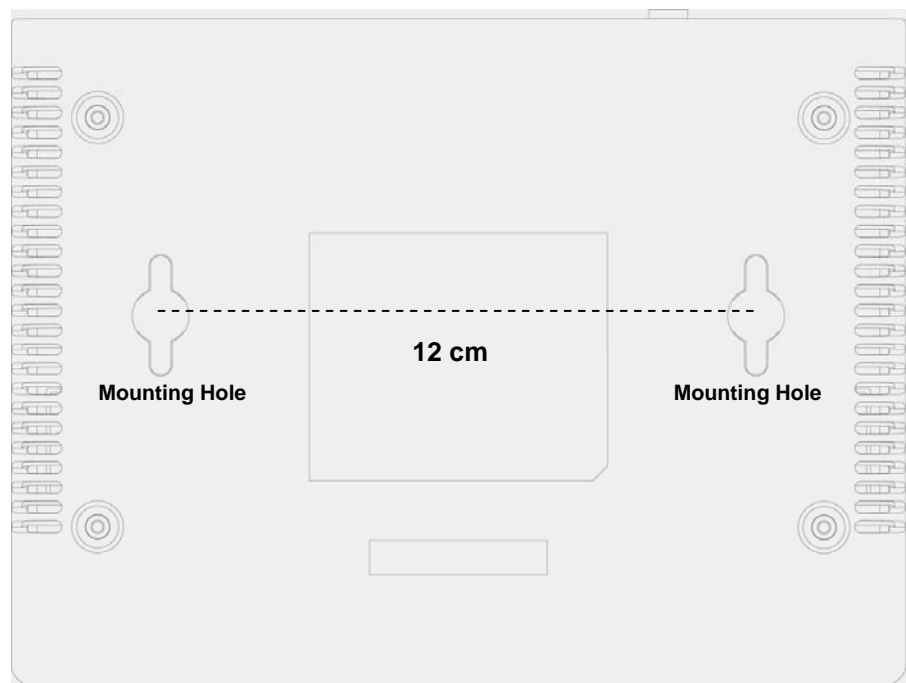
Rear Panel



Description

Name	Specification	Function
Line	SC/UPC	GE-PON port (Please keep it clean)
LAN	Ethernet Port	Ethernet Port connected to PC by a LAN UTP cable
DC5V2A	Power Input	Power input terminal to which power adapter is connected
PWR	Power Switch	Power On/Off Switch

Bottom



Troubleshooting:



Symptom: Can't access to the Internet;

- Step 1** Make sure that the ONT is turned on. Once you turn on the power, the POWER LED on the front panel of C501K should be turned on. If the PWR LED is turned OFF, please check if the power cable is connected to the power inlet of ONT properly or switch of power strip if any is turned ON. If the problem persists, please call BEAM Support.
- Step 2** Make sure that the optical line is connected properly. Once the optic fiber is connected, the LINE LED on the front panel of C501K should be turned on within few seconds. If the LINE LED blinks, call BEAM Support to check the optical line connection.
- Step 3** Make sure that the LAN cable is connected properly. Once the LAN cable is connected and user PC is turned on, LAN LED should be turned on. If the LED is not turned on, check the cable connection
- Step 4** Make sure that network setting of your PC is correct. Select "set to 'Obtain IP address automatically'".

Symptom: All the cables are connected, but still can't obtain IP address

- Step 1** Look for the Network Neighborhood or My Network Places icon in your desktop. If it is not there, try your Start Menu.
- Step 2** Right-click the Network Neighborhood/My Network Places icon. A drop-down menu will appear.
- Step 3** Choose the "Properties" option, generally found at the bottom of the menu.
- Step 4** Look for an icon named "Local Area Connection". The icon looks like a pair of computer connected by a link. Double-click this icon.
- Step 5** Click the "General" tab, if it is not already selected. You will see a list of protocols to choose from.
- Step 6** Scroll down and choose Internet Protocol (TCP/IP), and then click the button that is labeled "Properties".
- Step 7** Again, click the "General" tab, if it is not already selected. You will see two choices:
 - 1) "Obtain an IP address Automatically"
 - 2) "Use the following IP address..."
- Step 8** Choose 1) option
- Step 9** Click OK

Specification

Item		Specification
Standard		IEEE802.3ah
System Structure	Type	Desk-Top
	Dimension(mm)	180(W) X 135(D) X 40(H)
Power		5V, 2A (External Power Adaptor)
Interface	PON Interface	1 1000Base-PX, 1 Core SMF
	User Interface	1 10/100/1000base-T (IEEE802.3u)
Environment Condition		-Temp. : 0~50℃, Humidity: 0~80% -EMI/EMC Class B compliant
Function & Performance	PON Function	-IEEE802.3ah MPCP, OAM Compliant -802.1Q VLAN -Per LLID Filtering/Classification -Supports up to four Logical Link IDs(LLID) -AES-128 Downstream decryption -Dying Gasp
	L2 Function	IEEE802Q (VLAN)
	Multicasting	IGMP snooping
	QoS	-IEEE802.1P -Packet classification and marking (802.1P) -Rate limiting
	Security & filtering	-MAC address limiting
System Operation & Maintenance	Diagnosis	OAM Remote Loop-back test
Physical Characteristics	Optical Characteristics	-Distance : 10km -Transmit Quality : BER10 ⁻¹⁰ or less
	Dielectric Resistance	100Mohm or higher (Based on DC 500V)

Certificate of Installation: (Customer copy)

Product Name		BEAM GE-PON ONT
Model Name		C501K
Serial No.		
Date of Installation		/ / 20 (MM/DD/YY)
CUSTOMER	Name	
	Account Number	
	Address	
	Phone	
	E-mail	

Warranty does not cover damages resulting from accident, misuse or unsuitable operating environment

Certificate of Installation: (Company copy)

Product Name		BEAM GE-PON ONT	
Model Name		C501K	
Serial No.			
Date of Installation		/ / 20 (MM/DD/YY)	
CUSTOMER Feedback	Name		
	Address		
	Phone		
	E-mail		
	Structured Cabling done	YES	NO
	Demo given	YES	NO
	Signature		

Warranty does not cover damages resulting from accident, misuse or unsuitable operating environment

Ways to reach BEAM

Customer care: 040-66272727

Email: support@beamtele.com

<http://www.facebook.com/officialbeamfiber>

Bill Payment Modes:

Pay Online	Visit Portal.beamtele.com -> My Account -> Pay bill
	Visit www.beamtele.com -> Bill pay
Other options	At the e-seva centers
	Collection executive - Call us @ 66272727