

7973x/74x juma/forsete series fiber ftu/cpe for ftth, managed gigabit point-to-point ethernet

Built upon the strong DKTCOMEGA CPE/gateway product line, this is a new series of Fiber Termination Units / Wall Outlet that offers operators an easy FTTH Termination demarcation point in euro connector size. The series include a passive part to be installed during fiber termination as well as several active parts to be installed by the end-customer.



79742 FTU/CPE, 4-port RJ-45, CATV

High level specifications:

Hardware	Management	Power Characteristics
100/1000 Base-BX-U auto sense WAN	DKT OS based on Linux, provisioning via DHCP/TFTP	Power supply: External 5VDC, 2A
<i>The following is applicable for 79734:</i>	TELNET	Europlug, white color
1x 10/100/1000 Base-T (RJ-45) LAN	SSH	Power dissipation: <4.5W typical
<i>The following is applicable for 79741/2:</i>	SNMP v1/2/3	
4x 10/100/1000 Base-T (RJ-45) LAN	OAM as option supporting IEEE 802.3ah, Dying Gasp, Discovery and Loopback	
	<i>Future options</i>	
Optical Interface	TR-069, including support for TR-181	Environmental Specifications
SMF ITU-T G.652	CATV	Operating temperature: 0°C to 40°C
Optical Connector: SC/UPC	<i>The following is applicable for 79742:</i>	Max operating humidity: 85% RH (non-condensing)
TX 1260 - 1360 nm	1x RF-out F-connector (75 Ohm)	Storage temperature: 0°C to 70°C
RX 1480 - 1580 nm	Optical wavelength: 1310 ... 1550 nm	Max storage humidity: 95% RH (non-condensing)
15km range	Max optical input level: 0 dBm	Physical Characteristics
Laser Class 1	Operational optical input level: -10 ... -3 dBm	Operating temperature: 0°C to 40°C
Ethernet	RF bandwidth: 65 ... 1006 MHz	Dimensions (H x D x W): TBD x 88 x 88 mm
Auto-negotiating full/half duplex	RF output: 84 dBuV	Weight: <0.3kg
Auto-MDI/MDIX	RF flatness: <+/- 1dB	Approvals and Certifications
Layer 2 wire speed packet switching	CNR: > 49 dB	CE marking
IEEE 802.1Q VLANs (4k VLANs) incl Q-in-Q	CSO: > 60 dB	Safety EN 60950
IEEE 802.1Q tag insertion and stripping	CTB: > 60 dB	Emission: EN55022 Class B
DHCP relay/Option 82	Status LEDs	
4k MAC address database	WAN link/activity	
Ingress and egress rate limiting	LAN link/activity	
IGMP v1/2/3 snooping	Power On	
Support for Jumbo Frames	CATV (when applicable): < -10 dBm (red) > -10dBm (green)	
QoS		
IEEE 802.1p prioritization and reclassification		
4 QoS queues per port		
DSCP/ToS		

The device layout is based on a standard euro outlet form factor, customer perceives this unit as an outlet, not “yet another appliance in my house”. Analogy to power, CATV and telephony outlet, where the utility company and the operator make a clear demarcation point between the network and home installation. Comes as standard with 1x SC/UPC + 1x SC/APC, based on a none proprietary solution, can be adopted in environments with 3rd party equipment. Low power dissipation, supporting the recommendation of “Code of Conduct on Energy Consumption of Broadband Equipment”.

Ordering Information:

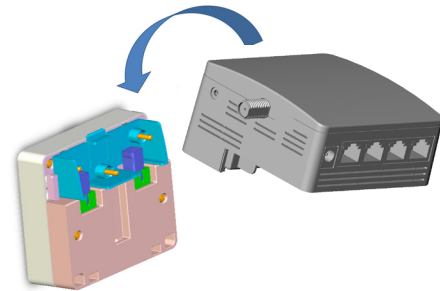
79734 - 1x 10/100/1000 Base-T LAN with 100/1000 Base-Bx WAN uplink, FTU has to be ordered separately
 79741 - 4x 10/100/1000 Base-T LAN with 100/1000 Base-Bx WAN uplink, FTU has to be ordered separately
 79742 - 4x 10/100/1000 Base-T LAN with 100/1000 Base-Bx WAN uplink + CATV, FTU has to be ordered separately

Disclaimer: DRAFT SPECIFICATIONS - Specifications are subject to change without notice

high level specifications:

Passive Fiber Termination Unit

Pigtails (applicable for 79700/720 only)	
Fiber length:	0.75m
Fiber diameter:	900um
Fiber type:	G.657 Type A
Fiber color:	White
Connector type:	SC/APC or SC/PC
Adaptor	
Type:	SC/APC or SC/PC
Housing color:	Green (SC/APC) or Blue (SC/PC)
Insertion Loss:	≤0.20dB
Interchangeability:	≤0.20dB
Repeatability:	≤0.20dB
Mechanical Durability:	1000 Cycles
Operating Temperatures:	-40 °C to +80 °C
Sleeves:	Zirconia sleeves



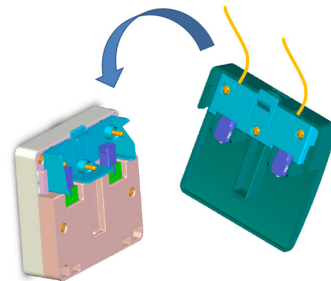
The FTU used as part of an Active Optical outlet solution:
The FTU is used for fiber management, and the active part, clickable on top of FTU.

The Passive Fiber Termination Unit consists of two pieces, one part for fiber management and one protection part curved cover.

Usage models:

Active Optical Outlet

The bottom part is used for fiber management, the protection cover is removed, and an active part can be clicked on top of the bottom part.



The FTU used as Passive Optical Outlet:
Protection Cover, secure fasten of patch cables, used for externally connectivity

Passive Optical Outlet

If 3rd party active equipment is used, such as switches and routers, then the unit can be used as Passive Optical Outlet. The protection part of the device can be used to secure patch cables for external connectivity, whereas the bottom part is used for fiber management.

Ordering Information:

The 79700 is included in the active products, but can also be ordered separately
79700 - 1x Passive FTU with 2 pigtails, SC/PC + SC/APC adapters, fiber management and dust protection cover
79716 - 1x Passive FTU without pigtails, SC/PC + SC/APC adapters, with fiber management and dust protection cover
79718 - 1x Passive FTU with 2 pigtails, SC/PC + SC/APC adapters, with fiber management and dust protection cover
79719 - 1x Passive FTU with 2 pigtails, 2x SC/PC adapters, with fiber management and dust protection cover
79720 - 1x Passive FTU with 2 pigtails, 2x SC/APC adapters, with fiber management and dust protection cover
Other types available upon request

high level specifications:

Passive Fiber Termination Unit, Small Form Factor

Small Form Factor FTU	
Fiber Type:	3000um fiber patch cord
Support for # of Fibers:	2
Dimensions including cover	23 x 88 x 88mm
Base Dimensions	15 x 88 x 88 mm

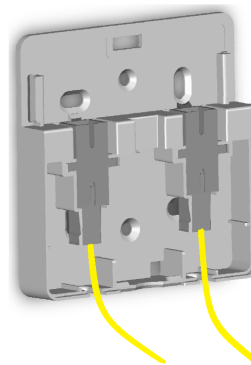
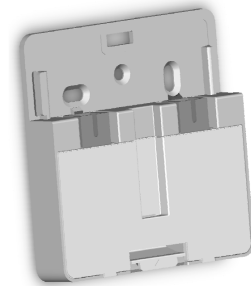
Adaptor	
Type:	SC/APC or SC/PC
Housing color:	Green (SC/APC) or Blue (SC/PC)
Insertion Loss:	$\leq 0.20\text{dB}$
Interchangeability:	$\leq 0.20\text{dB}$
Repeatability:	$\leq 0.20\text{dB}$
Mechanical Durability:	1000 Cycles
Operating Temperatures:	-40 °C to +80 °C
Sleeves:	Zirconia sleeves

The Small Form Factor Fiber Termination Unit consists of two pieces, one part for fiber installation (with cover lid) and one protection part curved cover, which is identical with other DKT products.

Passive Optical Outlet

The device is used to fasten and lock 2 optical patch cords, which are connected to an external fiber management device.

DKT Active CPEs can be clicked on to the Fiber Termination Unit.



Ordering Information:

79717 - 1x Passive FTU without pigtails, SC/APC + SC/APC adapters, small form factor with cabinet for patch cord installation