

## 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:<br>External 5VDC, 2A                       |
| <i>The following is applicable for 79734:</i>   | TELNET  | Europlug, white color, UK/US available upon request      |
| 1x 10/100/1000 Base-T (RJ-45) LAN               | SSH   | Power dissipation:<br><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 |  |
|   | TR-069, including support for TR-181                                      |  |
| Optical Interface                               | CATV  | Environmental Specifications                             |
| SMF ITU-T G.652                                 | <i>The following is applicable for 79740/42:</i>                          | Operating temperature: 0°C to 40°C                       |
| Optical Connector: SC/UPC                       | 1x RF-out F-connector (75 Ohm)  | Max operating humidity: 85% RH (non-condensing)          |
| TX 1260 - 1360 nm                               | Optical wavelength: 1310 ... 1550 nm                                      | Storage temperature: 0°C to 70°C                         |
| RX 1480 - 1580 nm                               | Max optical input level: 0 dBm  | Max storage humidity: 95% RH (non-condensing)            |
| 15km range, Laser Class 1                       | Operational optical input level: -10 ... -3 dBm                           |  |
| 79740 DATA loop through port: SC/APC            | RF bandwidth: 65 ... 1006 MHz   | Physical Characteristics                                 |
| Ethernet  | RF output: 84 dBuV  | Operating temperature: 0°C to 40°C                       |
| Auto-negotiating full/half duplex               | RF flatness: <+/- 1dB   | Dimensions (H x D x W):<br>65(58) x 88 x 88 mm (SFF FTU) |
| Auto-MDI/MDIX                                   | CNR: > 49 dB  | Weight: <0.3kg   |
| Layer 2 wire speed packet switching             | CSO: > 60 dB  |  |
| IEEE 802.1Q VLANs (4k VLANs) incl Q-in-Q        | CTB: > 60 dB  | Approvals and Certifications                             |
| IEEE 802.1Q tag insertion and stripping         |   | CE marking   |
| DHCP relay/Option 82                            | Status LEDs   | Safety EN 60950  |
| 4k MAC address database                         | WAN link/activity   | Emission: EN55022 Class B                                |
| Ingress and egress rate limiting                | LAN link/activity   |  |
| IGMP v1/2/3 snooping                            | Power On  |  |
| Support for Jumbo Frames                        | CATV (applicable for 79740/742):<br>< -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”.

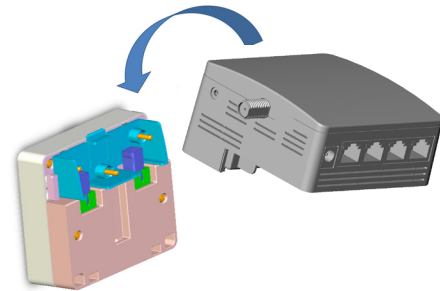
#### Ordering Information:

79734 - 1x 10/100/1000 Base-T LAN with 100/1000 Base-Bx WAN uplink, FTU has to be ordered separately  
 79740 - No WAN, CATV-Rx only, loop through DATA SC/APC adapter for 3rd party ONT, 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

# 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               |



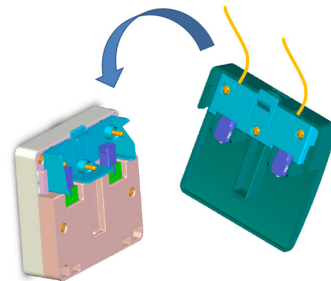
**The FTU used as part of an Active Optical outlet solution:**  
The FTU is used for fiber management, and the active part, clickable on top of FTU.

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:

79714 - 1x Passive FTU w/ WDM filter 1310/1490/1550nm, 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         |

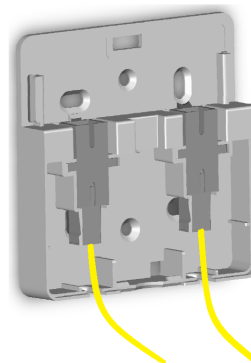
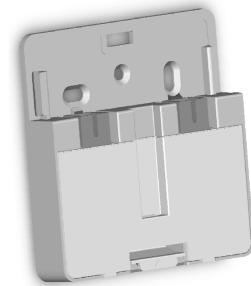
| Adaptor                 |                                |
|-------------------------|--------------------------------|
| Type:                   | SC/APC or SC/PC                |
| Housing color:          | Green (SC/APC) or Blue (SC/PC) |
| Insertion Loss:         | ≤0.20dB                        |
| Interchangeability:     | ≤0.20dB                        |
| Repeatability:          | ≤0.20dB                        |
| 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