

DOS – SN-MT16

DATA CENTER cable system



Description:

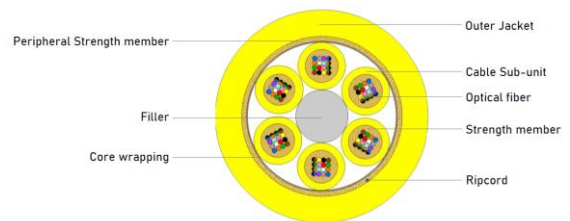
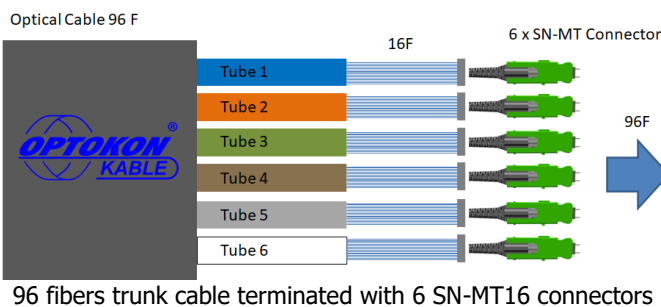
Due to the ever-increasing volume of data in global networks, Data Centers are becoming increasingly important, and their construction continues at a steady, faster pace. This places ever-increasing demands on the optical infrastructure. Optical cabling must be used to reliably interconnect data center devices, such as servers, switch data stores. It must also ensure the interconnection of individual data center nodes, connection to the global data network and connection of customers and users of data center services.

All this while ensuring maximum economy during installation and operation of the data center.

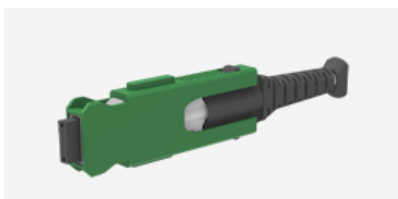
These requirements are met by the modular concept of the OPTOKON DOS cabling system. The system is based on factory prepared modules, preterminated cables, fan-out cassettes which significantly reduce the volume of installation work during construction and facilitate the fault clearance during operation.

The DOS - SN-MT16 cabling system is based on multi-fiber connector technology. The newly developed multi-fiber connectors SN-MT16 are designed to terminate 16 fiber cables. The use of trunk cables with these connectors eliminates the need for splicing in optical cabinets, speeds up installation and ensures system modularity.

Basically, the design of a cable with 96 fibers was chosen, 16 fibers are stored in 6 tubes.



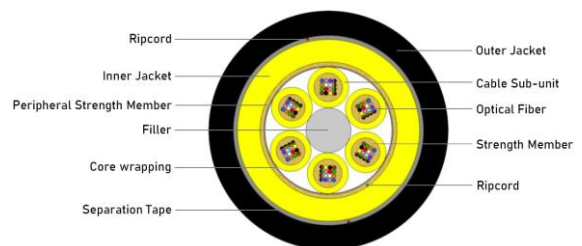
96 fibers cable design – indoor cable



SN-MT16 connector
16 fibers termination



SN-MT adapter for
4x SN-MT16
connectors



96 fibers cable design – outdoor cable

The cables with 96 fibers terminated with multifiber connectors are installed into PUDOS optical distribution frames equipped with SN-MT adapters, which is designed for 4 pcs of SN-MT16 connectors. The PUDOS can accommodate 24 SN-MT adapters, it means the total capacity of 1U frame is up to 1152 fibers, it might serve for future expansion.

PUDOS – optical distribution frame:

2 variants:

1. Termination of multifiber SN-MT connectors at front panel

Connection of end device by using fan-out cables:

SN-MT16 – 16x LC connectors

SN-MT16 – 16x SC, E2000, ...other on request

The PUDOS is an economical rack mountable patch panel for use with manufactured pigtails, pre terminated cables. The cables are strain-relieved at the rear of the unit. The pivoting shelf is equipped with bend radius protection which guides, stores and organizes excess slack. This prevents damage to fibers prior to routing into couplings. In addition the pivoting shelf allows full access to the internal fiber connection, easy cleaning and connection management.



PUDOS-1-1536-SNMT4
Termination for 1536 Fibers



PUDOS-1E-768-SNMT4
Termination for 768 Fibers

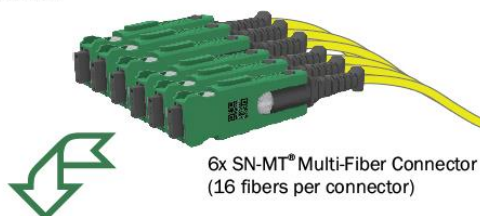


PUDOS-1E-1152-SNMT4
Termination for 1 152 Fibers

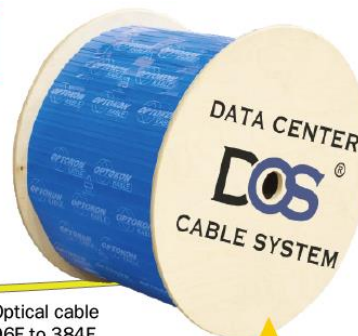
OPTOKON DOS solution for 96 fibers trunk cables – connection to the rack:

Next Generation Multi-Fiber Connector
SN-MT® 16 CONNECTOR up to 16F in one row

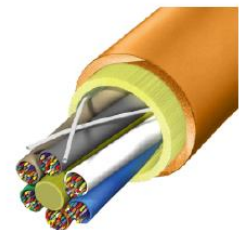
The cables with 96 - 384 fibers terminated with multifiber connectors are installed into PUDOS pull-out unit equipped with CNPM panels with SN-MT adapters.



6x SN-MT® Multi-Fiber Connector
(16 fibers per connector)



Optical cable
96F to 384F



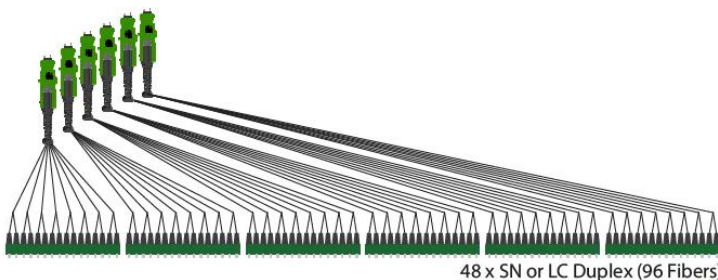
Example of PUDOS (1U Distribution Frame) with one CNPM panel equipped with 2 x SN-MT® Adapter and 6 connectors (96F)



1x CNPM panel = up to 6x SN-MT® Adapter for 4 connectors = 384 F
2x CNPM panels = up to 12x SN-MT® Adapter for 4 connectors = 768 F
3x CNPM panels = up to 18x SN-MT® Adapter for 4 connectors = 1 152 F

**MAX CAPACITY
1 152 FIBERS**

with 3 fully-equipped CNPM panels
in 1 unit



48 x SN or LC Duplex (96 Fibers)

High density with duplex SN® Connector and adaptor



2. Termination with CAPL fan-out cassette

Connection of end device by using fan-out CAPL cassette:

- Rear panel SN-MT16 multifiber connector
- Front panel 16x E2000, SC, duplex LC connectors

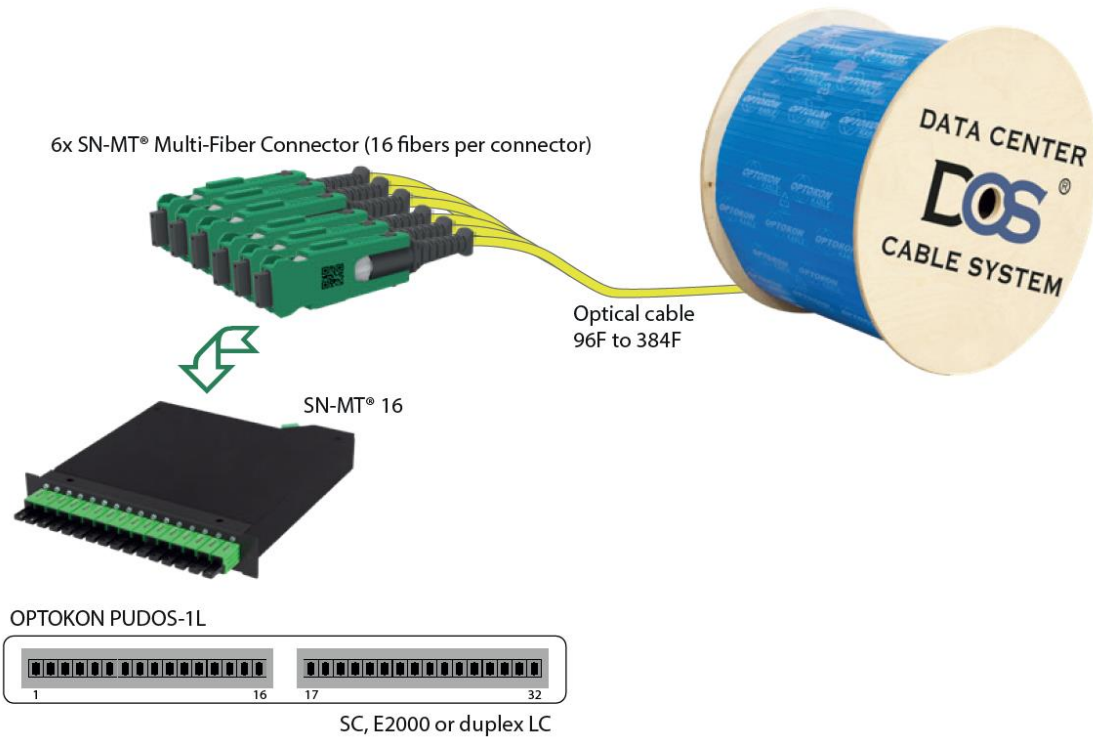
The system is based on the same DOS cable with 96 fibers, 16 fibers are stored in 6 tubes. One or two tubes terminated with SN-MT16 connectors are connected into SN-MT adaptor at rear panel of CAPL cassette. Internal fan-out from SN-MT16 ensures interconnection to 16 connectors terminated in adaptors at CAPL front panel.



PUDOS-1L-32-E2A
ODF for termination of 32x E2000/APC connectors



CAPL/F-16S7A-E2A-SNMT
Fan-out cassette



Interconnection between Data center nodes:

All racks in the Data Center hall are connected via 96 fibers trunk cable to the Aggregation rack. Aggregation rack includes outgoing cables to backbones, incoming cables from data users and another fiber optic infrastructure. Modular design allows easy cable extension and fiber optic network reconfiguration.

