

## CUBO mini – 100G Optical Multi-Purpose Tool

D-5222

### Introduction

Global demand for high bandwidth services shows no signs of slowing down. Service providers and Enterprise customers are increasingly looking beyond multiple \*10G. 100G optical transport is quickly evolving to meet these demands. The main driver behind this is the advancement and availability of a wide range of MSA QSFP28 transceivers - that are all experiencing a dramatic reduction in prices.

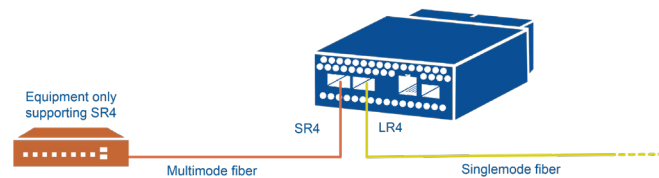
What's missing (until now) is a low cost, flexible and easy to install product for 100G connections – irrespective of the 100G QSFP28 MSA transceiver used.

### Media Converter



**Challenge** The interfaces provided by some equipment isn't always what is required. What if SR4 is supported but the distance to be bridged is 10km?

**Solution** CUBO mini, the cost effective media converter based on QSFP28 to convert between different interface types.

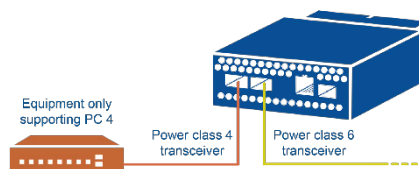


### Power Class Extender



**Challenge** MSA specifies 7 different power classes (PC) for QSFP28 transceivers. However, a lot of routers don't natively support all power classes. Some only support up to PC 4 and others support PC 7 but only by combining two ports. Only a very few routers natively support PC 7. A typical range for QSFP28 transceivers is between PC 4 and PC 6.

**Solution** CUBO mini, the cost effective MSA power class extender for QSFP28 transceiver.

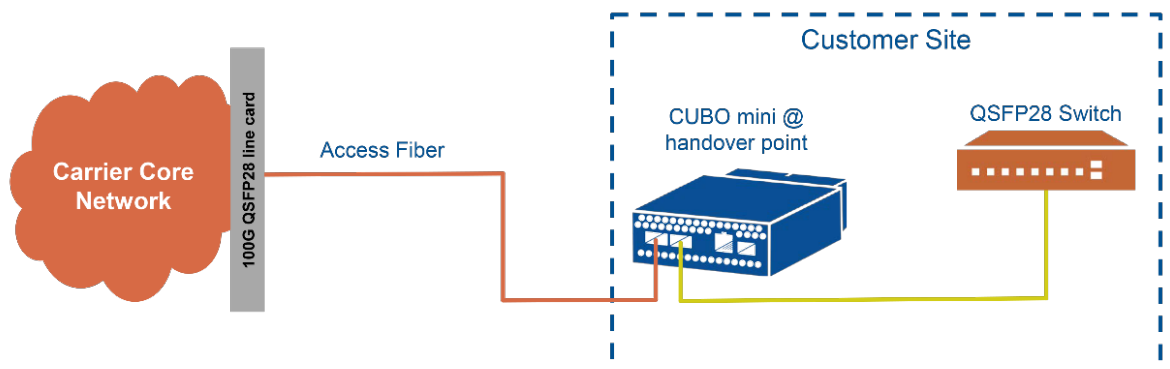


### Demarcation



**Challenge** The service provider needs to implement a working connection but generally can only access the handover point and not the rest of the installation.

**Solution** CUBO mini, the cost effective demarcation point based on QSFP28 at the handover point.



## CUBO mini – 100G Optical Multi-Purpose Tool

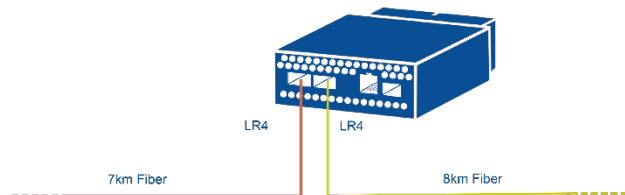
D-5222

### Repeater

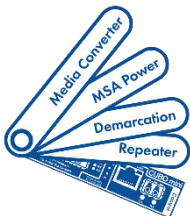


**Challenge** Sometimes the fiber length is just beyond that of what can be achieved by a pair of QSFP28 transceivers.

**Solution** CUBO mini, the cost effective repeater based on QSFP28 to regenerate the signal.

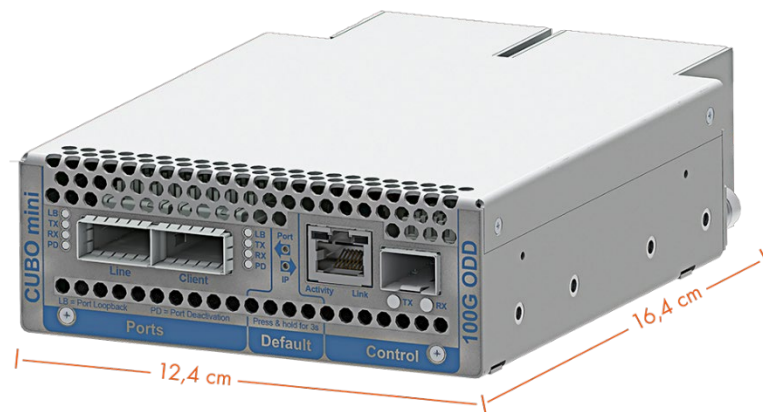


### The CUBO mini – Multi-Purpose Tool for optical 100G



The CUBO mini is a standalone device with 2x QSFP28 MSA slots. It supports any MSA compliant QSFP28 transceiver and any combinations of different QSFP28 are possible. Our mini offers a robust Layer 1 conversion between its input and output. The self-explaining WebGUI provides a responsive and consistent monitoring and control interface based on its SNMP (Simple Network Management Protocol) capability.

Mini means mini. The small size of 12,4 by 16,4 cm allows an easy installation at any convenient location at the destinations end. CUBO mini features real Plug and Play operation, thus making it extra easy for any self-installation. Once installed, offers the port loopback a fully functional test coverage for both QSFP28 slots.



HUBER+SUHNER Cube Optics AG  
is certified according to ISO 9001

#### Waiver

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge but they are intended for general information purposes only.

HUBER+SUHNER Cube Optics AG  
Eindhoven-Allee 3  
55129 Mainz Germany

Phone: +49-6131-4995-100  
Fax: +49-6131-4995-179  
Mail: sales.cubo@hubersuhner.com  
Web: www.hubersuhner.com  
www.cubeoptics.com