

OMS5/10	OMS5/6
OMS9/10	OMS9/6
OMS13/10	OMS13/6
OMS17/10	OMS17/6

Dear Customer,
 congratulations on the purchase of the EMP-Centauri product. Before its installation and putting into operation, read carefully the entire operation manual. Keep the purchase and rework (if any) records for future need.

1) Field of Application, Warranty

The product is designed for distribution of satellite signals in hybrid coaxial / fiber optic systems. EMP-Centauri FIBER CLASS products are covered under 4 (four) years warranty from the date of purchase, see details in EMP-Centauri General trade conditions, published at manufacturer's website www.emp-centauri.cz The user will be responsible for injury or material damage which may arise in consequence of any product use in contradiction with the manual. Repairs or any interventions in the product may be performed only by EMP-Centauri company, or other companies authorized by EMP-Centauri.

2) Technical Specifications

Products OMS5/10, OMS5/6, OMS9/10, OMS9/6, OMS13/10, OMS13/6, OMS17/10 and OMS17/6 are fiber to coaxial converters - optical multiswitches for up to 16 satellite polarities and terrestrial band. The optical multiswitches are devices with integrated optical receiver and satellite multiswitch in one common housing. They are powered from external power supply 12V DC which is included in the package. They have just one input for connecting of single mode optical cable from optical transmitter output, the recommended fiber cable to be used is singlemode. The complete signals of up to 4 satellites and terrestrial TV are received from the optical transmitter via this SC/APC optical input. The optical multiswitch is offered with ten coaxial outputs for direct connection of satellite set top boxes.

Specifications	OMS5/6	OMS5/10	OMS9/6	OMS9/10
Number of fiber inputs	1 (SC/APC)			
Optical input power	-20 ... +5 dBm			
Optical wavelength	1270–1350 nm	1270–1350 nm	1270–1430 nm	1270–1430 nm
Number of coaxial outputs	6	10	6	10
Frequency Range	TERR 5–862 MHz; SAT 950–2150 MHz			
Output Signal Level Range	50–95 dBuV (see table RF Signal level performance, page 3)			
Current consumption*	90 mA	90 mA	120 mA	120 mA
Dimensions (w,d,h)	25.5 x 18.0 x 7.0 cm			
Temperature Range	-25 ... +50 °C			

Specifications	OMS13/6	OMS13/10	OMS17/6	OMS17/10
Number of fiber inputs	1 (SC/APC)			
Optical input power	-20 ... +5 dBm			
Optical wavelength	1270–1530 nm	1270–1530 nm	1270–1610 nm	1270–1610 nm
Number of coaxial outputs	6	10	6	10
Frequency Range	TERR 5–862 MHz; SAT 950–2150 MHz			
Output Signal Level Range	50–95 dBuV (see table RF Signal level performance, page 3)			
Current consumption*	150 mA	150 mA	180 mA	150 mA
Dimensions (w,d,h)	25.5 x 18.0 x 7.0 cm			
Temperature Range	-25 ... +50 °C			

3) Product Takeover

Make sure that the product is not damaged. Please contact your dealer in the case of damage.

4) Product Storing and Installation

We recommend the device to be installed and serviced by the qualified technician.

The product must not be stored and installed:

- in the place with excessive humidity
- in the place with dropping or splashing water,
- in the place with excessive dust pollution, mechanical vibrations or impacts
- in the place out of temperature limits specified in the section 2) Technical Specifications
- close to heat sources (radiators or air ventilators, direct sunshine etc.)
- in the reach of children.

Use the apparatus only in moderate climates (not in tropical climate).

Fix the product firmly on a wall or another hard and inflammable surface with screws and dowels.

5) Product Connection

Connect the product in accordance with this manual and valid regulation. Use high-quality 75 Ω coaxial cable designed for satellite reception. Mount the F connectors (screw, crimp or compress type) on the ends of coaxial cables. Connect the F connectors into the F sockets of product and fasten them with an appropriate force. The coaxial cables shall not be broken, the minimum bending radius should be 5 cm. Fiber cable (recommended single mode) must be terminated with SC/APC connector.

Optical transmitter:

- Connect F sockets marked “A” – “D” with LNB outputs (recommended LNB type is Quattro)
- Connect input F socket marked “TERR” with output of terrestrial antenna, eventually with output of terrestrial amplifier or channel processing equipment
- Connect output SC/APC socket to other optical device (splitter, receiver)
- Connect DC2.1 socket marked “DC 12V” with power supply
- Connect connector marked with protective bounding symbol with protective bounding conductor

Note: Use only Quattro LNBS. If optical splitting is required, use PLC splitters.

Optical multiswitch:

- Connect input SC/APC socket to other optical device (splitter, transmitter)
- Connect output F sockets with user wall sockets or directly with satellite receivers*
- Connect DC2.1 socket marked “DC 12V” with power supply unit – it is included in the package
- Connect connector marked with protective bounding symbol with protective bounding conductor

* RF signals applied to transmitter’s inputs appear at multiswitch’s outputs

RF Signal level performance based on optical link configuration	Transmitter’s SAT input recommended RF level		RF gain / loss
	Min	Max	
Transmitter – opt. multiswitch, direct connection	45 dBuV	85 dBuV	10 dB (gain)
Transmitter – 2way splitter (PLC) – multiswitch	50 dBuV	85 dBuV	4 dB (gain)
Transmitter – 4way splitter (PLC) – multiswitch	55 dBuV	85 dBuV	-2 dB (loss)
Transmitter – 8way splitter (PLC) – multiswitch	60 dBuV	85 dBuV	-8 dB (loss)
Transmitter – 16way splitter (PLC) - multiswitch	65 dBuV	85 dBuV	-14 dB (loss)
Transmitter – 32way splitter (PLC) - multiswitch	70 dBuV	85 dBuV	-20 dB (loss)

The maximum signal level of the optical transmitter’s inputs should not exceed 85-90dBuV, there is a significant deterioration in signal quality at higher levels.

It is recommended to add terrestrial TV preamplifier at the terrestrial input of the transmitter.

The wiring examples are shown in the section 9) Wiring Diagrams or at the website www.emp-centauri.cz.





6) Safety

Due to security reasons the product and wiring in which the product is connected, must be grounded properly. Make sure the antennas are grounded properly. Connect all devices to power grid only after all connections are finished and checked. Never work on the wiring (including satellite receivers, TVs) during or before a storm. A lightning stroke into the antenna may cause dangerous overvoltage in the product metallic parts.

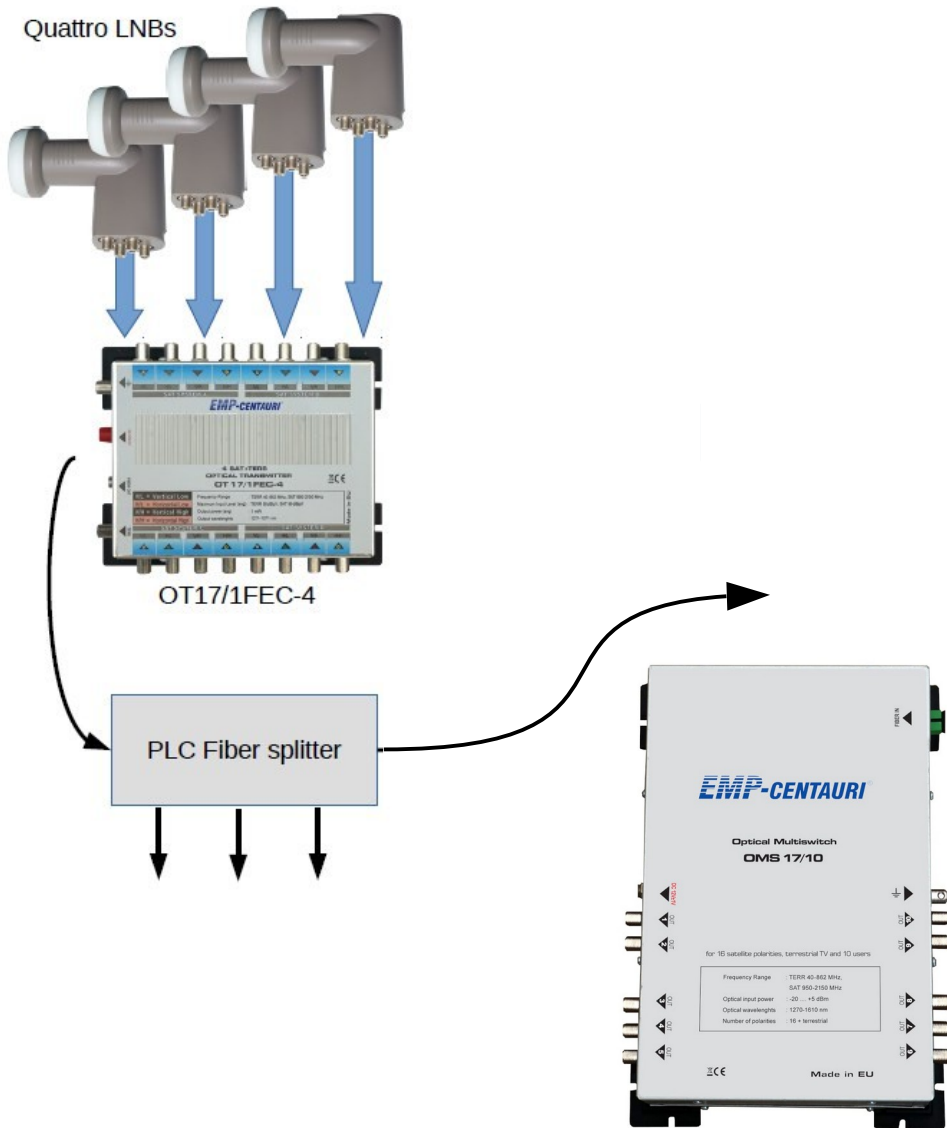
7) Product Maintenance

Always disconnect the product from the power supply and coaxial wiring before performing any maintenance of the product. If you have to enter places with a risk of fall, pay attention to your safety. Use only dry cloth to clean the product and do not use any liquid agents.

8) Symbols Explanation

	certificate of conformity		Protective ground		Invisible laser radiation
	According to EU directive, electric and electronic devices which are identified by one of the following symbols must not be disposed of together with municipal waste. When disposing of the old device, use local waste collection and separation systems.				

9) Wiring Diagram



10) Contact

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