Product Info

- your ultimate connection

Triax ORB 729

- Optical Receiver

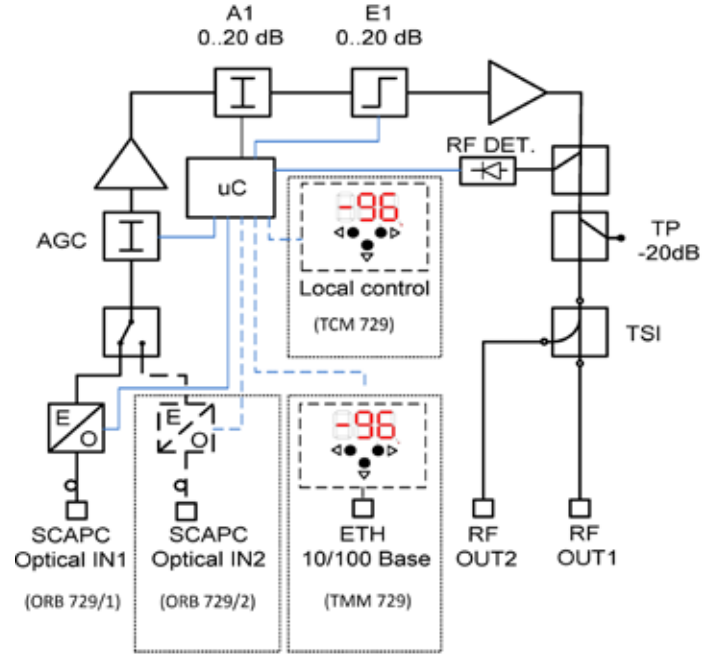
Art. No. 307700 and 307703

The Triax ORB 729 Optical Receiver provides an excellent, cost optimized and modular one-way FTTH solution. It is available with one or two Optical Inputs for redundancy.
The ORB 729 comes with electronic uninterruptable settings, can be monitored and setup locally as well as remotely. An automatic AGC system maintains the RF signal at a high stable output level.

The Triax ORB 729 can be controlled, based upon the configuration (see Model variant table), via a local keyboard (hot-swap module) or via an RJ45 Ethernet interface using the SNMPv2C protocol and a built-in server. This allows remote setting of output levels, alarm thresholds and switching the redundancy inputs as well as monitoring the output level via a built-in RF detector. Using a plug-in module the two F-connector outputs can be configured to different TAP-outs.

- Local and remote configuration – hot-swap module, or built-in RJ45 Ethernet interface (SNMP protocol)
- Uninterruptible electronic adjustments
- Independent switching hysteresis control for each optical input, with alarm threshold settings.
- Modular design
- Built-in AGC
- Monitoring and setting via built-in www interface
- High Output Level (114 dBµV – 42 ch. CENELEC)
- Low power consumption 13.5W
- Switch Mode Power Supply (180-253 VAC)
- Die-cast housing

ORB 729



Technical data: - see next page

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Technical data

Type Item no		ORB 729 See table below	Unit
Optical parameters			
Input level range (P_{IN})		-10...+1	dBm
AGC range		-6...+1.5	dBm
Optical return loss		>40	dB
Optical input wavelength		1100...1650	nm
Max. optical input level (no damage of photo diode)		+3	dBm
Optical power indicator range (electronic 3 x LED), accuracy:		±0.1	dBm
Equivalent input noise current		6.5	pA/(Hz)$^{1/2}$
Optical connector(s)		SC/APC	
RF parameters			
Frequency range		47...862	MHz
Gain flatness		±0.75	dB
Max. output level (42. ch. CENELEC)	CTB<60 dBc	114	dBµV
1310nm@-3dBm, 9 dB slope, 3.5% OMI, AGC off	CSO<60 dBc	114	dBµV
Interstage attenuator		0...15, step 1	dB
Interstage equalizer		0...15, step 1	dB
Return loss at RF output		>18 (40 MHz)-1.5dB/octave	dB
Output test point		-20	dB
Other			
Operating voltage, local PSU		180...253/50-60	VAC/Hz
Power consumption		13.5	W
Output connector		2 x F-female	
Protection class		IP 24	
Operating temperature range		-20...+55	°C
Weight		1.1	Kg
Dimensions		107x155x75	mm

Monitored parameters (via SNMP protocol)	Read/write	Monitored parameters (via SNMP protocol)	Read/Write
Input level (P_{IN})	R/-	Equalizer adjustments (Eq)	R/W
Hysteresis of optical input switching ($P_{IN\ min}$/$P_{IN\ max}$)	R/W	Location (GPS coordinates)	R/W
Input selection (1/2/preferred 1/preferred 2)	R/W	AGC settings	R/W
Output level RF (P_{out})	R/-	Identification (type, model, SN, MAC)	R/-
RF output power alarm (RF_{min}/RF_{max})	R/W	Ethernet connection (IP, DHCP)	R/W
Temperature (T)	R/W	Power supply	R/-
Temperature alarm (T_{min}/T_{max})	R/W	Tamper	R/-
Attenuator adjustment (A)	R/W		

Model variants	Name	Optical inputs	Local control module	Ethernet RJ45 remote control	Item number
ORB 729, 1 x optical input, no control, no RJ45 interface	ORB 729/1	1 x	-	-	307700
ORB 729, 2 x optical input, no control, no RJ45 interface	ORB 729/2	2 x	-	-	307703
TCM 729, local control module, hot swappable (order seperately)		-	x	-	307708
TMM 729, remote control module with RJ45 interface (order seperately		-	-	x	307709

RF output modules (order at least one)	RF OUT 1	RF OUT 2	Item number
TJMP 01, One way jumper - included with ORB 729/x-(only RF OUT 1 has signal)	0 dB	∞	307710
TSTI 01, 2 way RF splitter module	-3.5 dB	-3.5 dB	307711
TTSI 26, 2 way RF TAP module	-2 dB	-6 dB	307712
TTSI 19, 2 way RF TAP module	-1 dB	-9 dB	307713
TTSI 112, 2 way RF TAP module	-1 dB	-12 dB	307714
TTSI 114, 2 way RF TAP module	-1 dB	-14 dB	307715

Recycling:
This product is manufactured in compliance with current EU environmental and recycling requirements and standards (WEEE, RoHS, etc.). Please observe your local implementation and requirements when recycling.

TRIAX - your ultimate connection
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