OPTICAL FIBRE TWIST NODE / RECEIVER

- Self-installation fibre node /receiver
- One base unit
- Various interfaces available (DOCSIS / GPON)

Typ	OFT D1	OFT D	OFT D RX	OFT DT	OFT G	OFT GC
Item-No.	57003998/ 57004565/ 57004566 / 57004567 57004568	57003336 / 57003570 / 57003923 / 57003924 / 57003922/57004482/ 57004483/57004484	57003573	57004027	57003574	57003575
	DOCSIS 3.1 Interface	DOCSIS 3.1 Interface	DOCSIS 3.1 Interface	DOCSIS 3.1 Interface	GPON Interface	GPON Interface
Full Digital load*1	DS / US 77 dBµV fix 75 dBµV fix	DS / US 67 dBµV fix 65 dBµV fix	only DS 75 dBµV fix	DS / US 77 dBµV fix	DS / US	DS / US + HF Overlay

*1 Digital: EN 60728-3,119 CH, 262-1214MHz, flat

Electrical and general data

Type		typ.	Remarks
Input voltage	V	11 ... 17, typ. 12	
Power supply type		external 12V	
Power cord type		Female	
Power consumption	W	4.5	
Power indicator		green LED on	
Dim switching of diodes		4 levels	
Ambient temperature	°C	-20 ... +55	
Output impedance	Ω	75	
Safety requirements		acc. EN 60728-11	
EMC conditions	dBpW	acc. EN 50083-2	
Protective system		IP 20	
Immunity to surge voltages	kV	2	EN 60728-3
MTBF	h	~ 200000	Acc. Telcordia SR-332
Conformity		CE	

Mechanical data

Type		typ.	Remarks
Dimensions	mm	110 x 110 x 46	Fibre Twist box
Optical port		1	SC / APC connector
DC power port		1	P/NTK 18-001 2.0 DC JACK
RF port		2	75 Ohm F-female

Additional Accessory

Type	Item No.
FTU Fibre twist unit for wall mounting	57003555

Downstream Receiver

Type		OFT D OFT D1/T	OFT D RX	Remarks
Optical wavelength	nm	1545-1565		other on request
Integrated WDM filter		yes	no	Bidi module
Equivalent input noise current density (NCD)	pA/√Hz	typ.3		
Responsitivity R of photodiode	A/W	0.95		
Optical input power range	dBm	-8 ... 2		green LED on: within this range
Optical input return loss	dB	45		
Optical RX diode		PIN		
Optical level control (OLC)	dBm	-7 ... 1		
Frequency range	MHz	105 /258 ... 1218	47 ... 1218	fixed diplexer OFT D /D1/T 12xx
Ripple	dB	typ. +/- 0.5		
Gain tolerance over temperature	dB	max. +/- 1.5		
RF output level (full digital load) *1	dBµV	65 / OFT D1/T: 75	75	
Return loss RF output		≥18 - 1.5/Okt.		
DS Signal indications	dB	Diode in the middle : „ V „ (DS) - on/off (green LED) blink: level to high, on: level ok, off: level to low		Reference 85 - 1218 MHz

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Upstream Transmitter

Type		typ.	Remarks
Laser wavelength	nm	1610, 1470, 1450, 1410	
Optical power	dBm	3	
Laser type		Isolated DFB	
Relative intensity noise (RIN)	dB/Hz	< -160	
Laser turn-on time	nsec.	450	acc. IEC 60728-14
Laser rise time	nsec.	300	acc. IEC 60728-14
Laser turn-off delay time	nsec.	600	acc. IEC 60728-14
Frequency range	MHz	5 ... 85 / 204	depending on fixed diplexer
Ripple	dB	max. +/- 0.3	
Optical output return loss	dB	45	
Laser turn on RF level	dBµV	90	
Return loss RF input	dB	≥ 18	5 - 85 / 204 MHz
OMI per channel		10 % @ 99 dBµV	8 x 256 QAM / 8 MHz
Uplink signal indications		Diode on the right: "^" (US) blink: burst mode (green LED)	