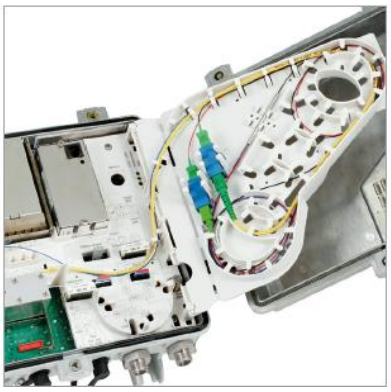
KATHREIN ORA 9022

OPTICAL COMPACT RECEIVER

- Modular FTTC fibre node
- Internal optical interfaces for full outdoor operation (protection class IP 54)
- Optical interfaces optionally on the device exterior to enable external connection
- Innovative operational concept: using electronic tuning elements, set using HTE 10 hand-held unit
- Electronically settable return path matrix:
  - Redundant operation
  - Return path segmentation
  - Automatic switch-over in case of signal interruption
- WDM couplers or splitters can be integrated optionally
- Latest GaAs-MMIC technology
- Fully redundant operation in forward and return path possible
- 1 or 2 receiver modules pluggable
- 1 or 2 high level outputs (2 separate end stages)
- Output level up to 112 dBµV
- „Plug-and-Play“ by combination of AGC (optical input) and ALSC (2 pilots)
- Automatic levelling in the forward path
- Extremely low-noise receiver (best device in its class)
- 1 or 2 return path transmitter modules pluggable for segmentation or redundancy, see OSR 900x
- Optical return path transmitter modules available in DFB/CWDM technology



SPECIFICATIONS

ORA 9022			
Order no.		24710023	
Operation with receiver module		ORD 20 ORD 21	
FORWARD PATH		**ORD 20**	**ORD 21**
Frequency range	MHz	85-862	
Optical wavelength	nm	1280-1580	
Optical return loss	dB	> 40	
Optical input level range, 1310 nm, nominal	dBm	-7 … -1 [1])	-7 … +2
Optical input level range, 1550 nm, nominal	dBm	-8 … -2 [1])	-8 … +1
Max. optical input power (permanent)	dBm	+3	
Nominal optical modulation index (OMI)	%	4.4	
Impedance	Ω	75	

Number of outputs (internally settable)		1 or 2	
Max. output level, per output (practical operation)	dBµV	112	
Output pre-emphasis 85-862 MHz	dB	0-9	
Frequency response	dB	± 1.5	
Equivalent noise current density, input	pA/√Hz	4	5
MAX. OUTPUT LEVEL ACC. TO CENELEC [2])			
CSO > 60 dB	dBµV	116	
CTB > 60 dB	dBµV	113	
Return loss (at 85 MHz)	dB	19 -1.5/oct., > 16	
Hum modulation ratio at 7 A: 85-862 MHz	dB	> 67	
RETURN PATH (GENERAL): SEE ALSO PRODUCT INFORMATION OSR 900X			
Frequency range (through diplex filter)	MHz	5-65	
Frequency range (through broadband inputs)	MHz	5-200	
Impedance	Ω	75	
Return loss	dB	18	
Frequency response (total)	dB	± 1.5	
Input level for OMI of 8 % (per channel)	dBµV	65	
Attenuation ICS	dB	0/6/40	
POWER SUPPLY			
Input voltage range	VAC	30-72	
Mains frequency range	Hz	47-63	
Power consumption incl. an ORD 2x, 1/2 active outputs	W	28/33	
Power consumption fully-equipped, 1/2 active outputs	W	38/43	
GENERAL DATA			
Radiated interference power 5-30 MHz	dBpW	< 27-20	
Radiated interference power 30-862 MHz	dBpW	< 20	
RF connections (external)		PG 11	
Ingress test sockets/broadband inputs (external)		F connectors (female)	
Dimensions (W x H x D)	mm	280 [3]) × 125 × 244	
Weight	kg	3.1	
Housing material		Aluminium diecast, varnished	
Remote feed current on the outputs	A	< 7	
Remote feed current feed-in (power passing)	A	< 10	

[1]) Higher input level possible for slightly lower values (CSO)
[2]) Measurement conditions: output level 110 dBµV, 9 dB pre-emphasis
[3]) 307 mm incl. hinges