TMD02210

Frequency Amplifier and distributor over optical

Functions

TimeLink microsystems ©©©©©

- TMDO2210 product family amplifies and distributes 5 or 10MHz signals
- 11 or 12 outputs are available depending on the option
- The equipment is a rackable drawer 1U, 19 inches
- The front face displays a "ON" LED and a status LED per output
- Each output level is adjustable per the user

Characteristics

- Input level goes from 0 to 13 dBm ±1 dBm
- Outputs provide 0 to 13 dBm ±1 dBm over de 50Ω
- All the outputs are isolated individually by a transformer
- The STANDARD noise phase floor is: 1Hz: -90 dBc/Hz, 10Hz : -110 dBc/Hz, 100Hz : -120 dBc/Hz, 1KHz : -120dBc/Hz, ≥ 10KHz : -120 dBc/Hz
- The OPTIMIZED noise phase floor is: 1Hz: -90 dBc/Hz, 10Hz : -120 dBc/Hz, 100Hz : -140 dBc/Hz, 1KHz : -140dBc/Hz, \geq 10KHz : -140 dBc/Hz
- The outputs have low-pass (5MHz) or band-pass filters (10MHz)
- Specific gain settings can be provided on-demand thanks to factory settings:
 - Specific gain settings must be defined within the order
 - On the back face, each output gain can be setup manually
 - Typical settings with a 1 to 1 factory gain setting:

Input Value	0dBm	3dBm	5dBm	13dBm
Output Value min	-2dBm ± 1dBm	-2dBm ± 1dBm	-2dBm ± 1dBm	4dBm ± 1dBm
Output Value max	6dBm ± 1dBm	12dBm ± 1dBm	12dBm ± 1dBm	17dBm ± 1dBm

- Input and output connectors are located back face and are of BNC type (RF) and SC/APC singlemode (Optical).
- Power 230V AC by standard power supply connector EEC with fuse, filter sector and On/Off switch.
- Alarm Output for remote monitoring: contact relay free of potential. Connector "STATUS" Sub' D 9 points female.
- Dimensions: Width 483 mm, Height 45 mm, Depth 320 mm
- Power consumption: 20W
- Weight: 3 Kg
- MTBF: 105 000 h
- Certified CE ROHS REACH ITAR FREE

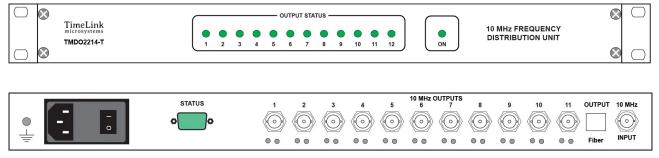
Alarm connector pin out	NORMALLY OPEN CONTACT	1
	COMMON	6
	NORMALLY CLOSED CONTACT	2
	5 4 3 2 1	Front view
	$\bigcirc \circ \circ$	
	9876	

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TMD02210-T10



 TMDO2210-T product family receives a 10MHz over a coaxial cable and distribute it to an optical fiber output and 11 coaxial cables output

TMD02210-R10



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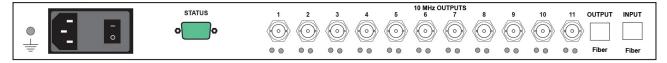
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Fiber

• TMDO2210-R product family receives a 10MHz over an optical fiber and distribute it to 12 coaxial cables output

TMD02210-RT10



 TMDO2210-RT product family receives a 10MHz over an optical fiber and distribute it to 11 coaxial cables output and one optical fiber

Order codes

1

TMD02210 – X Y Z

x	5	Option 5 Mhz	
	10	Option 10 Mhz	
Y	LNO	Optimized noise phase	
	STD	Standard nois phase	
z	т	Transmit optical fiber signal	
	R	Receive optical fiber signal	
	RT	Receive and Transmit optical fiber signal	



Typical implementation

A typical implementation of TMDO2210 is to distribute a reference frequency from a stable source like Rubidium towards satellite sites through optical fiber.

