

Multi-Photo detector Array 80 channels Rack-Mountable model MPA-100

The MPA-100 is a highly integrated rack model of pigtailed photo-detector array. Multi-channels optical power from MPO or MTP connectors are detected by photo-detector array. Photo-detector of Si type for 850nm range and InGaAs type for 1260~1610nm are available. The detected photo-current are converted to voltage output using a 16-bit DAQ interface. The dimension is (W)482.6x(D)430x(H)44mm. The highly integrated MPA-100 is available up to 80 channels. The MPA-100 is useful for many applications, such as testing and monitoring of transceivers for data communications in data centers, broadband / CATV, and telecommunications. Tap-PD model (fibers input&output, a partial power detection) is also available upon customer's request.



Features

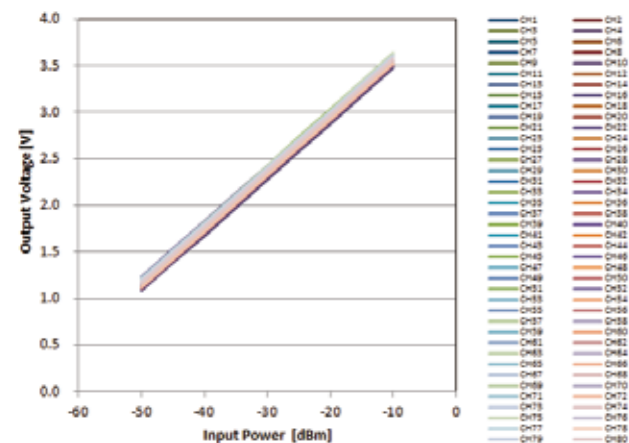
- ▶ Multi-channels photo-detector array up to 80 channels
- ▶ Power monitoring and testing at 850 nm SR4, SR10
- ▶ Wide-operating wavelength range: 1260 ~ 1610nm
- ▶ Wide-optical input range: -50 ~ -10 dBm
- ▶ Excellent linearity: +/- 0.6dB
- ▶ MPO adapter / High-density MPO, MTP connectors
- ▶ 16-bit DAQ voltage output by a USB interface
- ▶ 1U Size (44mm) slim design
- ▶ Custom model is available upon request

Applications

- ▶ Optical power testing of transceivers for IEEE 802.3ba based SR4, SR10, LR4, ER4
- ▶ Optical power monitoring for data communications, broadband / CATV networks, and telecommunication networks
- ▶ Optical power monitoring in data center equipment
- ▶ Optical power monitoring of Interconnections of active optical cables.

Measurements

Example of input power and output voltage for 80 channels in a MPA-100-10-8-IR-SM-MT-01.



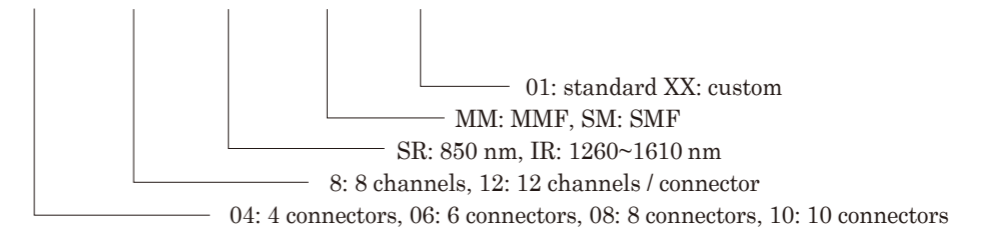
Specifications

Category	Parameter	Unit	Min.	Typ.	Max.	Notes
Optical	Total optical input ports	channels	32		80	Channels / optical connectors X connectors
	Optical connectors	-	4		10	MPO or MTP
	Optical channels / connector	-	8		12	
	Operating wavelength range	nm	840		860	SR: Silicon photodiode
		nm	1260		1610	IR: InGaAs photodiode
	Optical input power range	dBm	-50		+3	per channel
	Absolute maximum optical input power	dBm			+10	
	Optical noise limit	dBm			-55	Typ. -63 dBm@1550nm
	Optical fiber	-	MMF , SMF			MMF: Core dia. 50 mm, Clad dia. 125mm SMF: ITU-T G.652
	Optical adapter	-	MPO adapter			Vendor: OFS or Nissin Kasei
Optical connector	-	MPO , MTP			Standard: Gender: Pins(male) Polish: Angled polish (8degree) Vendor: Furukawa	
Electrical	DAQ	bit	16			NI USB 6255 OEM
	Data sampling rate	Samples/s	9,375			
	PD response bandwidth *1	kHz	10			Typ. 30+/-3 kHz
	Linearity	dBm	-0.6		0.6	Typ. +/-0.1 dB, optical input power range
	Digital Input & Output *2	-	USB			
	wavelength calibration data	-	SR , No IR , Yes			IR: data format of wavelength, optical power, output voltage
	Power consumption *3	W		20	30	DC12V
Environmental	Operating temperature	degC	15		+35	RH: 85%Max, No condensation
	Storage temperature	degC	-5		+70	RH: 85%Max, No condensation
Mechanical	Dimensions (W)x(D)x(H)	mm	(W)482.6x(D)430x(H)44			
	Weight	kg	4.4			
Warranty	-	Year	1			

*1 The bandwidth is defined as 3dB down (Linear scale: 0.7071) of optical frequency response. The response slope is designed in 20dB/dec.
*2 Attached 2 meters USB cable as accessory
*3 Attached AC100-240V to DC12V Adapter as accessory

Ordering Code

MPA-100 -xx - xx - xx - xx - xx



www.santec.com

2021 © SANTEC CORPORATION Santec reserves the right to make changes in equipment design, components or specifications without notice.



SANTEC CORPORATION
5823 Ohkusa-Nenjozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-3536 Fax +81-568-79-1718

SANTEC USA CORPORATION
433 Hackensack Ave., Hackensack, NJ, 07601, USA Toll Free +1-800-726-8321 (santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

SANTEC EUROPE LIMITED
Grand Union Studios, 332 Ladbroke Grove, London W10 5AD Tel. +44-20-3176-1550

SANTEC (SHANGHAI) Co., Ltd.
21F Room H, Hua Du Bldg., No.838 Zhangyang Road, Pudong, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263

