multichannel systems

µPA Micro Preamplifier

Type	**µPA16**	**µPA32**
Operating Temperature	0° C to 50° C	0° C to 50° C
Storage temperature	0° C to 50° C	0° C to 50° C
Relative humidity	10 % to 85 % non-condensing	10 % to 85 % non-condensing
Dimensions (W x D x H)	ca. 17 mm x 17 mm x 2.5 mm w/o connector ca. 21 mm x 17 mm x 2.5 mm with connector	ca. 20 mm x 25 mm x 3 mm w/o connector ca. 24 mm x 25 mm x 3 mm with connector
Weight	1.5 g w/o cable and plug,	2 g w/o cable and plug
Length of the cable	1.5 m	1.5 m
Maximum tensile strength of cable	20 N	20 N
Input connector type	18-pin dual-row Omnetics A79039-001 (NSD-18-DD-GG with 2 guide posts, female)	36-pin dual-row Omnetics A79023-001 (NSD-36-DD-GS with 4 guide posts, female)
Mating connector type	Omnetics NPD-18-XX-GS with 2 guide posts, male	Omnetics NPD-36-XX-GS with 4 guide posts, male
Mating NeuroNexus probe	F16, CN16, C16, C32	F32, CN32, H32, HP32, MRCM32
Output connector type	26-pin HD D-Sub, male (Harting TB 09 56 200 5615)	44-pin HD D-Sub, male (Harting TB 09 56 200 5615)
Supply voltage	± 2.5 V	± 2.5 V
Supply current	< ± 15 mA, typically ± 14 mA	< ± 30 mA, typically ± 26 mA
Number of input channels	16	32
Input voltage	± 250 mV (with respect to a supply voltage of 2.5 V)	± 250 mV (with respect to a supply voltage of 2.5 V)
Input impedance	10^7 Ω @ 1 kHz	10^7 Ω @ 1 kHz
Input capacitance	13 pF, according to the manufactur's datasheet	13 pF, according to the manufactur's datasheet
Input noise	< 1.2 μV_{PP} (0.1 Hz to 10 Hz, inputs shortened)	< 1.2 μV_{PP} (0.1 Hz to 10 Hz, inputs shortened)
Noise density	$e_n = 10\ nV / \sqrt{Hz}$ @ 1 kHz	$e_n = 10\ nV / \sqrt{Hz}$ @ 1 kHz
Number of output channels	16	32
Output voltage	supply voltage maximal	supply voltage maximal
Output current	30 mA maximal	30 mA maximal
Output impedance	0 Ω	0 Ω
Bandwidth	DC to 50 kHz	DC to 50 kHz
Gain	10	10