

Measuring Amplifiers of Voltage and Charge

NTIP5100, NTIP5200



Parameter	Unit	NTIP5100	NTIP5200* ²
Input voltage range.....	V	± 10	± 10
Input charge range.....	pC	10 ⁵	10 ⁴
Frequency range at the level - 3 dB.....	Hz	0.3 ... 10 ⁵	0.3 ... 3 • 10 ⁴
Input resistance.....	Ohm	> 10 ⁹	> 10 ⁹
Output resistance.....	Ohm	< 100	< 100
Maximum output voltage at the non-linear distortion factor < 5 %.....	V	± 10	± 10
Root-mean-square noise value (reduced to the input).....	µV	< 10	< 5
Power of transducers with built-in preamplifier:			
- voltage.....	V	+24	+24
- current.....	mA	3.6	3.6
Voltage ranging factor, (error ± 0,5 %).....	-	1, 2, 5, 10, 50, 100, 200, 500	1, 10, 100, 1000
Current ranging factor, (error ± 0,5 %).....	mV/pC	0.1; 0.2; 0.5; 1; 2; 5; 10; 20; 50; 100; 200; 500	1, 10, 100, 1000
Influence coefficient of ambient air temperature change within the range from 0 to 40°C on amplification and conversion factor...%/ ^o C		-	≤ 0.025
Condition factor:			
- voltage.....	V/Eg	1 ... 10.99	1 ... 9.99
- current.....	pC/Eg	(step 0.01)	(step 0.01)
Main measuring error:			
- RMS acceleration	%	± 1	
- RMS vibration velocity.....		± 1.5	± 1

Parameter	Unit	NTIP5100	NTIP5200 ^{*2}
Built-in filters with the AFC decay no less than 20 dB/decade at the level - 3dB:			
- high-frequency filter.....Hz		0.3; 1.0; 3.0; 10	0.3; 1.0; 3.0
- low-frequency filter.....kHz		-	1; 3; 30
Built-in low-frequency filters with the AFC decay no less than 30 dB/decade at the level - 3dB.....kHz		1; 3; 10; 30	-
Supply voltage.....V		+ (12 ± 2)	+ (12 ± 2)
Consumption current.....mA		< 600	< 300
Input connector type:			
- unbalanced charge connector	-	BNC	10-32 UNF
- balanced charge connector	-	TWIN BNC	-
- with built-in preamplifier		BNC	BNC
Output connector type.....-		BNC	BNC
Power supply.....-		self-sufficient and network from adapter	network from adapter
Dimension.....mm		195×145×120	145×77×43
Weigh.....gram		1,200	500