# Programmable Controllers MICREX-SX series Standard I/O module

## Analog input module: NP1AX

### Performance specifications

Model	Input	No. of	Signal range	Digital converted	Digital	Tolerance	Converting	No. of occupied words	Insulation between	External	Internal current	Weight
	format	channels		value	resolution		speed	(input + output)	channels	connections	consumption (24 V DC)	
NP1AX04-MR	Multi-range	4 ch	-5 to +5 V DC	-500 to +500	10 bits	±0.5% or less	4 ms/	8 words +	Non-insulation	Terminal	120 mA or less	Approx.
	input		0 to 20 mA DC	or		(at 25°C)	4 ch	2 words		block		200 g
			4 to 20 mA DC	0 to 1000		±1.0% or less						
			-20 to +20 mA DC			(at 0 to 55°C)						
NP1AXH4-MR	1		0 to 5V DC	-8000 to +8000	14 bits	±0.1% or less	1 ms/					
			0 to 10V DC	or		(at 25°C)	4 ch					
			1 to 5 V DC	0 to 16000		±1.0% or less						
			-10 to +10 V DC			(at 0 to 50°C)						
NP1AX08V-MR		8 ch	0 to 5V DC	-500 to +500	10 bits	±0.5% or less	5 ms/	16 words +				
			0 to 10V DC	or		(at 18 to 28°C)	8 ch	2 words				
			1 to 5 V DC	0 to 1000		±1.0% or less						
			-5 to +5 V DC			(at 0 to 55°C)						
			-10 to +10 V DC									
NP1AX08I-MR	1		0 to 20 mA DC									
			4 to 20 mA DC									
			-20 to +20 mA DC									
NP1AXH8V-MR	1		0 to 5V DC	0 to 16000	14 bits	±0.1% or less (at 18 to 28°C)	2.5 ms	8 words +			200mA or less	Approx.
			0 to 10V DC			±0.2% or less (at 0 to 55°C)	or less/	4 words				240 g
			1 to 5 V DC			±0.3% (at 0 to 55°C,	8 ch					_
			-10 to +10 V DC	-8000 to +8000	1	1 to 5 V range)						
NP1AXH8I-MR	1		0 to 20 mA DC	0 to 16000	1	±0.1% or less (at 18 to 28°C)	1					
			4 to 20 mA DC			±0.4% or less (at 0 to 55°C)						
			-20 to +20 mA DC									
NP1AXH8VG-MR	1		0 to 5V DC	-32000 to	16 bits	±0.05% or less	30 ms		Insulation		150mA or less	Approx.
			0 to 10V DC	+32000 or		(at 18 to 28°C)	or less/					280 g
			1 to 5 V DC	0 to 32000		*1	8 ch					
			-10 to +10 V DC									
NP1AXH8IG-MR	1		0 to 20 mA DC			±0.239% or less						
			4 to 20 mA DC			(at 10 to 55°C)						
			-20 to +20 mA DC									

\*1 Take 40 minutes or more for warm-up (no need to warm-up for  $\pm 0.2\%$ )

#### Characteristic diagram



#### Characteristic pattern 3



\*1 For NP1AX04-MR and NP1AXH4-MR, the lower limit value (digital value) is "0".

#### Input value and converted value

Input range	Character	istic patteri	n 1	Character	istic patterr	ו 2	Characteristic pattern 3			
	Resolution	n		Resolutior	ı		Resolution			
	10 bits	14 bits	16 bits	10 bits	14 bits	16 bits	10 bits	14 bits	16 bits	
-5 to 5 V				±500	±8000					
0 to 5 V				1000	16000	32000				
1 to 5 V							1000	16000	32000	
0 to 10 V	1000	16000	32000							
-10 to 10 V	±500	±8000	±32000							
0 to 20 mA				1000	16000	32000				
4 to 20 mA							1000	16000	32000	
-20 to 20 mA				±500	±8000	±32000				