

PPX Specifications

The specifications apply when the PPX is powered on for at least 30 minutes under +20°C~+30°C.

DC Output Mode		PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
Output voltage		10.000V	20.000V	20.000V	36.000V	36.000V	100.00V
Output current		5.0000A	2.0000A	5.0000A	1.0000A	3.0000A	1.0000A
Output power		50W	40W	100W	36W	108W	100W
CONSTANT VOLTAGE OPERATION							
Line regulation ^{*7}		±(0.01% of setting + 1mV)	±(0.01% of setting + 1mV)	±(0.01% of setting + 1mV)	±(0.01% of setting + 3mV)	±(0.01% of setting + 3mV)	±(0.01% of setting + 7mV)
Load regulation ^{*8}		±(0.01% of setting + 2mV)	±(0.01% of setting + 2mV)	±(0.01% of setting + 3mV)	±(0.01% of setting + 3mV)	±(0.01% of setting + 4mV)	±(0.01% of setting + 7mV)
Transient response ^{*1}		<50us					<100us
Ripple & noise	(Vrms*2/ Vpp*3)	0.35mVrms/<6mV Vpp	0.5mVrms/<8mV Vpp	0.5mVrms/<8mV Vpp	0.8mVrms/<10mV Vpp	0.8mVrms/<10mV Vpp	1.2mVrms/<15mV Vpp
Rise time ^{*4}	Rated load	20ms or less	50ms or less				100ms or less
	No load	20ms or less	50ms or less				100ms or less
Fall time ^{*5}	Rated load	10ms or less	20ms or less				50ms or less
	No load	100ms or less	150ms or less				250ms or less
Setting range (105%)		0V to 10.5V	0V to 21.0V	0V to 21.0V	0V to 37.8V	0V to 37.8V	0V to 105.0V
Setting resolution		0.2mV	0.5mV	0.5mV	1mV	1mV	2mV
Setting accuracy (23°C±5°C)		±(0.03% of setting + 3mV)	±(0.03% of setting + 5mV)	±(0.03% of setting + 5mV)	±(0.03% of setting + 8mV)	±(0.03% of setting + 8mV)	±(0.03% of setting + 20mV)
Maximum remote sensing compensation voltage (single line)		1V					3V
Temperature Coefficient (TYP) ^{*6}		100 ppm/°C					
CONSTANT CURRENT OPERATION							
Line regulation ^{*7}		±(0.02% of setting + 250uA)	±(0.02% of setting + 100uA)	±(0.02% of setting + 250uA)	±(0.02% of setting + 50uA)	±(0.02% of setting + 150uA)	±(0.02% of setting + 50uA)
Load regulation ^{*9}		±(0.02% of setting + 250uA)	±(0.02% of setting + 100uA)	±(0.02% of setting + 250uA)	±(0.02% of setting + 50uA)	±(0.02% of setting + 150uA)	±(0.02% of setting + 50uA)
Ripple & noise	(Arms ^{*2})	2mA	1mA	2mA	400uA	1mA	1mA
Setting range (105%)		0A to 5.25A	0A to 2.1A	0A to 5.25A	0A to 1.050A	0A to 3.15A	0A to 1.050A
Setting resolution		0.1mA	0.05mA	0.1mA	0.02mA	0.1mA	0.02mA
Setting accuracy (23°C±5°C)		±(0.05% of setting + 3.0mA)	±(0.05% of setting + 1.0mA)	±(0.05% of setting + 3.0mA)	±(0.05% of setting + 0.5mA)	±(0.05% of setting + 1.5mA)	±(0.05% of setting + 1.0mA)
Temperature Coefficient (TYP) ^{*6}		200 ppm/°C					
<p>*1. Time for output voltage to recover within ±(0.1% + 10mV) of its rated output for a load change from 50% to 100% of its rated output current.</p> <p>*2. Measurement frequency bandwidth is 5 Hz to 1 MHz.</p> <p>*3. Measurement frequency bandwidth is 10 Hz to 20 MHz.</p> <p>*4. From 10%~90% of rated output voltage, with rated resistive load.</p> <p>*5. From 90%~10% of rated output voltage, with rated resistive load.</p> <p>*6. Temperature coefficient: after a 30 minute warm-up.</p> <p>*7. At 90~110Vac or 108~132Vac or 198~242Vac or 216~264Vac, constant load.</p>							

*8. From No-load to Full-load, constant AC input voltage.

Make sure that test leads and output terminals are well connected.

It is suggested that utilize 4-wire connection when European terminal output models are employed.

*9. For load voltage change, equal to the unit voltage rating, constant AC input voltage.

Measurement and Display		PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01	
Voltage Range	H	10.000V	20.000V	20.000V	36.000V	36.000V	100.00V	
	L	1.0000V	2.0000V	2.0000V	3.6000V	3.6000V	10.000V	
Current Range	H	5.0000A	2.0000A	5.0000A	1.0000A	3.0000A	1.0000A	
	M	500.00mA	200.00mA	500.00mA	100.00mA	300.00mA	100.00mA	
	L	50.000mA	20.000mA	50.000mA	10.000mA	30.000mA	10.000mA	
	LL	5.0000mA	2.0000mA	5.0000mA	1.0000mA	3.0000mA	1.0000mA	
Measurement Resolution	Voltage (H)	1mV					10mV	
	Voltage (L)	0.1mV					1mV	
	Current (H)	0.1mA					0.1mA	
	Current (M)	0.01mA					0.01mA	
	Current (L)	0.001mA					0.001mA	
	Current (LL)	0.0001mA					0.0001mA	
Measurement Accuracy	Voltage (H/L)	±(0.03% of rdg + 2mV)	±(0.03% of rdg + 4mV)	±(0.03% of rdg + 5mV)	±(0.03% of rdg + 6mV)	±(0.03% of rdg + 8mV)	±(0.03% of rdg + 15mV)	
	Temperature Coefficient ⁻¹ (TYP)	100 ppm/°C						
	Current (H/M)	±(0.05% of rdg + 2.5mA)	±(0.05% of rdg + 1.0mA)	±(0.05% of rdg + 2.5mA)	±(0.05% of rdg + 0.4mA)	±(0.05% of rdg + 1.2mA)	±(0.05% of rdg + 1.0mA)	
	Current (L/LL)	±(0.1% of rdg + 40µA)	±(0.1% of rdg + 24µA)	±(0.1% of rdg + 40µA)	±(0.1% of rdg + 16µA)	±(0.1% of rdg + 28µA)	±(0.1% of rdg + 24µA)	
	Temperature Coefficient ⁻¹ (TYP)	200 ppm/°C						

*1. Temperature coefficient: after a 30 minute warm-up.

Temperature measurement		PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
Temperature (K-Type Thermocouple)	Range	-200°C~+1372°C					
	Resolution	0.25°C					
	Accuracy	±(0.5% + 2°C)					
Protection		PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
Over Voltage Protection (OVP)	Operation	Turns the output off, displays OVP and lights ALARM					
	Setting range	0.5V to 11.0V	1.0V to 22.0V	1.0V to 22.0V	1.8V to 39.6V	1.8V to 39.6V	5.0V to 110.0V
	Setting Accuracy	±(1% of rating)					
Over Current Protection (OCP)	Operation	Turns the output off, displays OCP and lights ALARM					
	Setting range	0.25A to 5.5A	0.1A to 2.2A	0.25A to 5.5A	0.05A to 1.1A	0.15A to 3.3A	0.05A to 1.1A
	Setting Accuracy	±(1% of rating)					
Over Temperature Protection (OTP)	Operation	Turns the output off, displays OTP and lights ALARM					
Communications		PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
LAN		MAC Address, DNS IP Address, User Password, Gateway IP Address, Instrument IP Address, Subnet Mask					

USB	Type A: Host, Type B: Slave, Speed: 1.1/2.0, USB-CDC					
RS-232/RS-485	Complies with the EIA-RS-232/RS-485 specifications (excluding the connector)					
Input ratings (AC rms)	PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
Nominal input voltage ^{*1}	100Vac / 120Vac / 220Vac / 240Vac(±10%), 50Hz / 60Hz, single phase					
Input frequency range	47Hz to 63Hz					
Max. Inrush current	25Amax or less	20Amax or less	30Amax or less	35Amax or less	40Amax or less	30Amax or less
Max. power consumption	200VA	150VA	300VA	150VA	300VA	300VA
*1. Before connecting the power plug to an AC line outlet, make sure the voltage selector switches of the bottom panel in the correct position. It might be damaged the instrument by connecting to the wrong AC line voltage.						
General	PPX-1005	PPX-2002	PPX-2005	PPX-3601	PPX-3603	PPX-10H01
Dimensions (mm) & Weight	107(W)×124(H)×313(D) (not including protrusions) · Approx. 5.5kg					
Operating temperature	0° C to 40° C					
Storage temperature	-20° C to 70° C					
Operating humidity	20% to 80% RH; No condensation					
Storage humidity	20% to 85% RH; No condensation					
Altitude	Maximum 2000m					
EMC	Complies with the European EMC directive 2014/30/EU for Class A test and measurement products.					
Safety	Complies with the European Low Voltage Directive 2014/35/EU and carries the CE-marking.					
Withstand voltage	Between input and chassis	No abnormalities at 1500 Vac for 1 minute.				
	Between input and output	No abnormalities at 3000 Vac for 1 minute.				
	Between output and chassis	No abnormalities at 500 Vdc for 1 minute.				
Insulation resistance	Between input and chassis	500 Vdc, 100MΩ or more				
	Between input and output	500 Vdc, 100MΩ or more				
	Between output and chassis	500 Vdc, 100MΩ or more				