

P X T S E R I E S



High-Capacity Wide-Range DC Power Supply

PXT Series

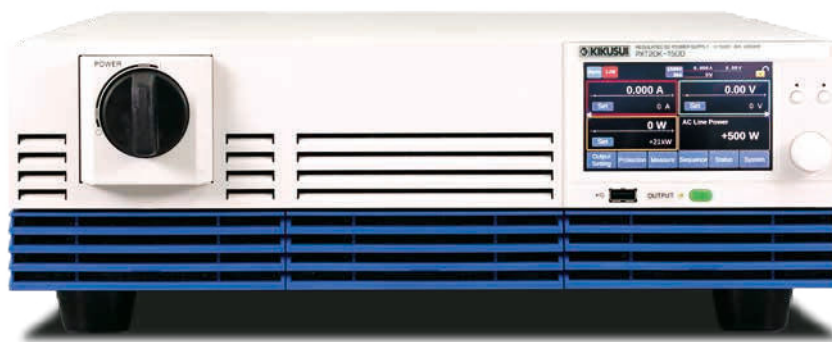
NEW

- Maximum 20 kW output in a 3U size
- Supports a maximum voltage of 1500 V
- Select input voltage from 200 Vac (3-phase) or 400 Vac (3-phase)
- Bleeder ON/OFF function
- Output ON/OFF delay function
- One-control parallel operation function (up to 10 units of the same model)
- Touch panel for intuitive operation
- LAN, USB, RS232C, external analog control (isolated type) standard





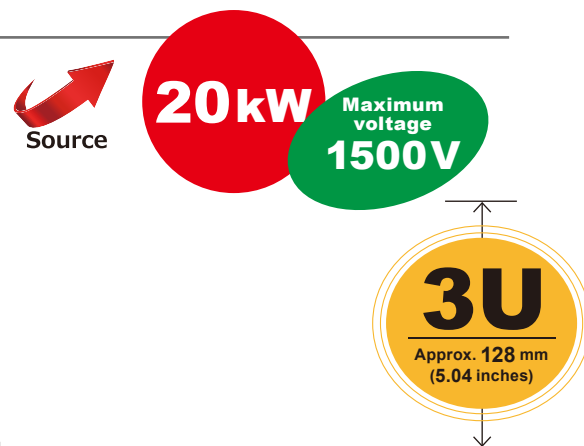
The PXT Series of high-performance, high-capacity, wide-range DC power supplies offers a maximum rated output of 20 kW in a compact 3U size. In addition to variable internal resistance, bleeder ON/OFF, and output ON/OFF delay functions, the PXT series has various communication interfaces (LAN, USB, and RS232C as standard). It can be used as a stand-alone device or integrated into testing equipment. Furthermore, the excellent heat dissipation design guarantees an ambient operating temperature of 50°C, making the unit suitable for harsh, high-temperature testing environments. The PXT Series is also highly scalable, and its capacity can be increased to 200 kW in parallel operation (up to 10 units).



High-Capacity Wide-Range DC Power Supply **PXT Series**

Features

- Maximum 20 kW output in a 3U size
- Supports a maximum voltage of 1500 V
- Select input voltage from 200 Vac (3-phase) or 400 Vac (3-phase)
- Bleeder ON/OFF function
- Output ON/OFF delay function
- Full-load continuous operation is possible even at ambient temperatures as high as 50 °C (122 °F)
- One-control parallel operation function (up to 10 units of the same model)
- Touch panel for intuitive operation
- LAN, USB, RS232C, external analog control (isolated type) standard
- External control I/O is standard for both NPN and PNP type PLCs

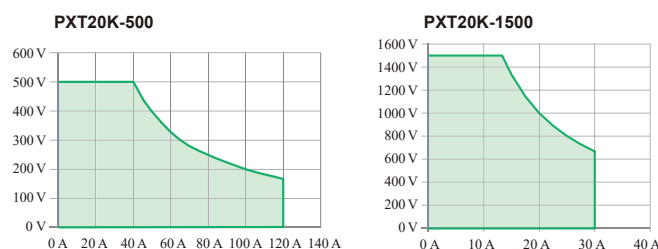


Lineup / Main Specifications

Specifications	Output			Ripple noise	Power fluctuation	Load variation		Input current	Weight	
	CV V	CC A	Rated power kW	CV mVrms	CV mV	CC mA	CV mV	CC mA	AC 200 V (3-phase 3-wire) / 400 V (3-phase 3-wire) A	Approx. kg(lbs)
PXT20K-500	0 to 500	120	20	100	±100	±240	±250	±240	80/40	38(83.78)
PXT20K-1500	0 to 1500	30	20	300	±300	±60	±750	±60	80/40	37(81.57)

2.25 to 3 times mains-powered operation

The PXT series has an operating range of 2.25 to 3x power ratio, which allows for a wide range of voltage and current setting combinations. For example, the PXT20K-500 can seamlessly operate from 500 V-40 A to 166.6 V-120 A within the rated output power range of 20 kW.



Conceptual diagram of operating area



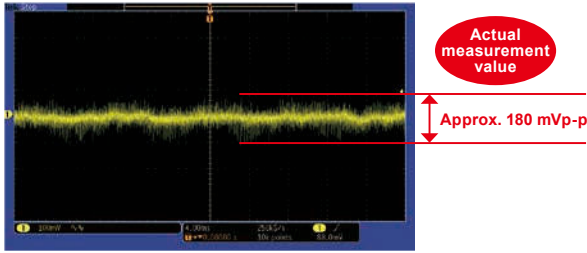
Approx. 60% lighter

Approx. 1/3 smaller

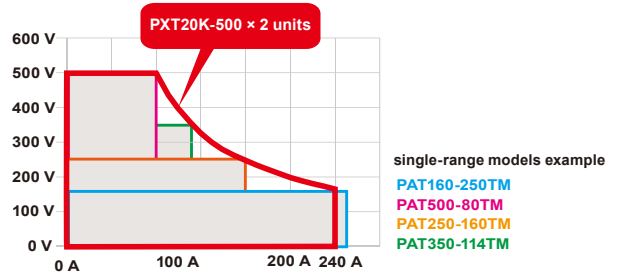


This switching-type power supply has low ripple noise.

*PXT20K-500: Specified value 700 mVp-p (100 mVrms)

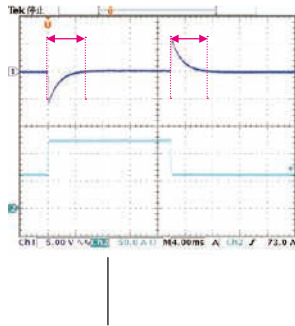


PXT20K-500 | Output voltage: 500 V | Div: 100 mV
 Output current: 40 A | Resistance load
 Output power: 20 kW | Oscilloscope bandwidth 20 MHz



A transient response of 6 ms or less* ensures high-quality output waveforms even when the current changes abruptly.

*The time required for the output voltage to return within $\pm (0.1\% + 10 \text{ mV})$ of the rated output voltage when the CV mode response is set to FAST. The output current fluctuation value is 50 % to 100 % of the maximum current at the set output voltage.

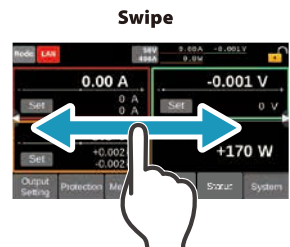


Turning the bleeder function on quickly discharges the electrical charge accumulated in the load when the OUTPUT was turned off and allows the output voltage to be lowered. A battery connected to the output terminal will be discharged when the bleeder function is on, even if the OUTPUT is turned off. In such cases, unnecessary discharge can be prevented by turning the bleeder function off.

Item	Description
Enable	Turns the bleeder function on. Sink current flows when the output is off.
Disable	Disables the bleeder function. Prevents unintended discharge when output is turned off. However, a low sink current will still flow due to the resistance inside the PXT series. The reference values of the internal resistance are as follows: PXT20K-500: approx. 55 kΩ PXT20K-1500: approx. 560 kΩ



Model	Operation Mode	Slew rate
PXT20K-500	CV [V/ms]	0.125 / 1.25 / 12.5 / 25
	CC [A/ms]	0.03 / 0.3 / 3 / 6
PXT20K-1500	CV [V/ms]	0.375 / 3.75 / 37.5 / 75
	CC [A/ms]	0.0075 / 0.075 / 0.75 / 1.5



Performance / Functions

The EXT CONT connector on the rear panel can be used to control the PXT series with external devices. The general-purpose digital input and output terminals can be assigned any function, facilitating system construction in combination with other measurement devices. Digital I/O standard for both NPN and PNP type PLCs. Analog I/O is isolated from output terminals as standard, allowing safe analog control from PLC.



Terminal No.	Method	I/O	Name	Description
1	Digital	O	OUT Ch.1	General-purpose output terminal
2	Digital	O	OUT Ch.2	General-purpose output terminal
3	Digital	O	OUT Ch.3	General-purpose output terminal
4	-	-	DO COM	Digital output common
5	-	-	DI COM	Digital input common
6	Digital	I	IN Ch.1	General-purpose input terminal
7	Digital	I	IN Ch.2	General-purpose input terminal
8	Digital	I	IN Ch.3	General-purpose input terminal
9	-	O	+12 V OUT	12 V reference voltage available for digital input
10	-	-	-	Not used
11	-	-	A COM	Analog signal common
12	Analog	O	V MON	Voltage monitor
13	Analog	O	I MON	Current monitor
14	Digital	O	OUT Ch.4	General-purpose output terminal
15	Digital	O	OUT Ch.5	General-purpose output terminal
16	Digital	O	OUT Ch.6	General-purpose output terminal
17	-	-	DO COM	Digital output common
18	-	-	DI COM	Digital input common
19	Digital	I	IN Ch.4	General-purpose input terminal
20	Digital	I	IN Ch.5	General-purpose input terminal
21	Digital	I	H ALARM IN	HIGH alarm EXT HIGH occurrence
22	-	-	12 V COM	12 V reference voltage common
23	-	-	A COM	Analog signal common
24	Analog	I	EXT CV	Voltage control in the constant voltage mode
25	Analog	I	EXT CC/CP	Current control in the constant current / power modes

Method	Function
Analog input	Setting of voltage and current values
Analog output	Monitoring of voltage and current values
General-purpose isolated digital input (Ch.1 to ch.5) *Photocoupler isolated input (Supports both current sink and source)	<ul style="list-style-type: none"> • Output ON/OFF from DC OUTPUT terminal • LOW alarm generation / deactivation • Start / Stop totalizer measurement • Reset totalized value • Measurement trigger input • Preset memory recall
Digital input (Ch.6)	HIGH alarm generation (Fixed)
General-purpose isolated digital output (Ch.1 to ch.6) *Semiconductor relay output	<ul style="list-style-type: none"> • Monitor output status of DC OUTPUT terminal • Power-on monitor • Alarm monitoring • Operating mode monitoring • Preset memory monitoring

General-purpose isolated digital input terminals are available from Ch.1 to Ch.5. Any setting value from the items listed on the right can be selected.



- ▶ INTEG CTRL
- ▶ INTEG RESET
- ▶ ACQUIRE TRIG
- ▶ SEQ TRIG IN
- ▶ MEM1 RECALL
- ▶ MEM2 RECALL

* Ch.6 is fixed at "H Alarm IN".

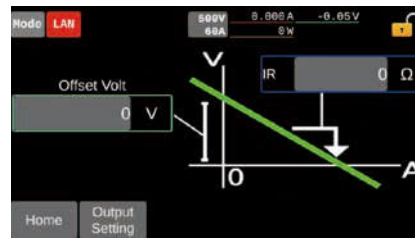
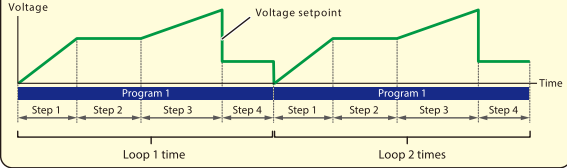
General-purpose isolated digital output terminals are available from Ch.1 to Ch.6. Any setting value from the items listed on the right can be selected.



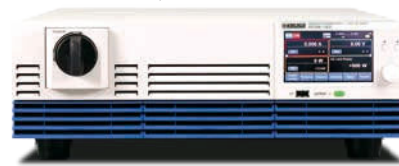
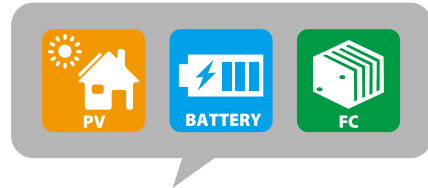
- ▶ EXT DIN BUSY
- ▶ MEM1 ACT TIME
- ▶ MEM2 ACT TIME
- ▶ RELAY DRIVE



A total of 30 programs can be created.
Up to 10,000 steps can be created for all programs combined.
Example) Where number of Loops in program 1 is 2.

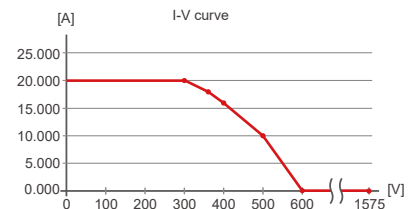


Item	PXT20K-500	PXT20K-1500
Setting range	0 Ω to 5250 mΩ	0 Ω to 63000 mΩ
Setting resolution	1 mΩ	5 mΩ



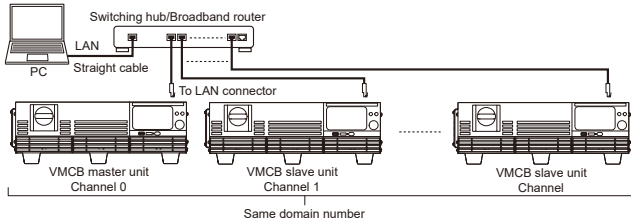
PXT20K-1500 CC mode setting example

Score	Voltage [V]	Current [A]
1	0	20.000
2	300	20.000
3	360	18.000
4	400	16.000
5	500	10.000
6	600	0.000
7	1575	0.000





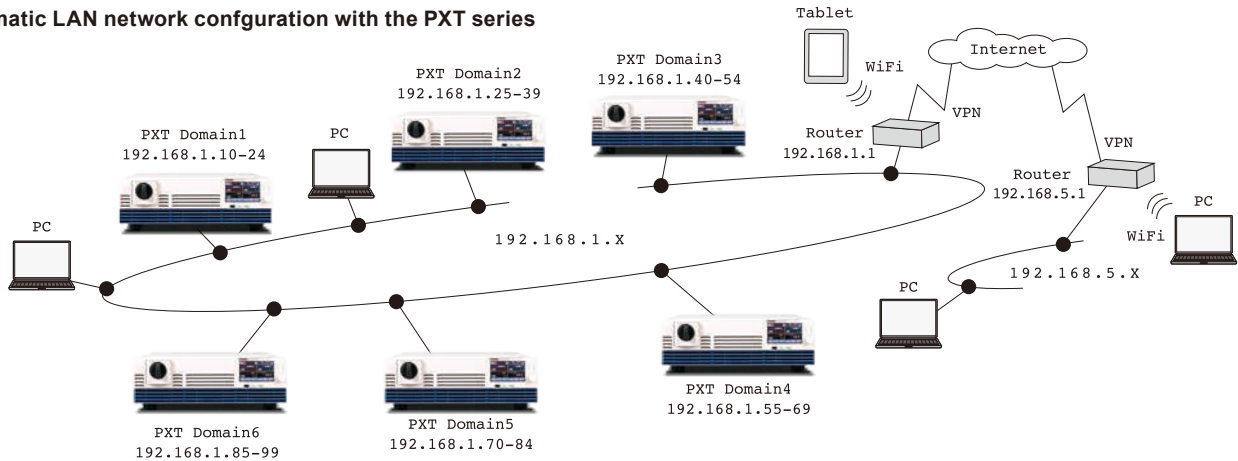
When connecting the VMCB master unit via LAN



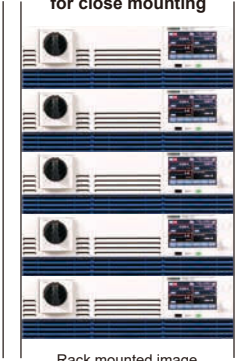
Communication monitoring function

This function monitors the communication status. For example, the alarm will be activated and the output will be turned off when the LAN cable is disconnected and the communication is not being confirmed within the specified time of setting. This function protects the operation from the uncontrolled condition, and it improves the system reliability.

Schematic LAN network configuration with the PXT series



Intake and exhaust on the front and back only, allowing for close mounting

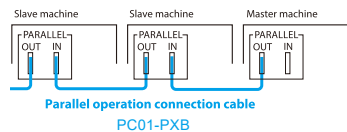


* Including master machine, up to 10 units (200 kW) can be operated in parallel. Connection is with one-control parallel operation, and the panel of the master machine can control and display the entire system. With the automatic recognition function, the need for complicated settings is eliminated, allowing the construction of high-capacity systems.

* Parallel operation is possible between models with different input rated voltages.

• Please contact us if you wish to operate more than 10 units in parallel.

Connection conceptual diagram



Full output at rated power regardless of input voltage. Choose from 3-phase 3-wire 200 V or 400 V models. No output limitation for either input voltage.



Solid performance under operating temperatures of 0°C to 50°C (32 °F to 122 °F). Exhibits full performance even in environments with severe ambient temperatures, such as when installed in equipment.



- OVP (Over voltage protection)
- UVP (Under voltage protection)
- WDOG (Communication error protection)
- EXT LOW (External input alarm detection)
- OPP (Over power protection)
- OCP (Over current protection)

Specifications

Unless specified otherwise, the specifications are for the following settings and conditions.

Item	PXT20K-500	PXT20K-1500
Rated power	20000 W	
Rated voltage *1	0 V to 500 V	0 V to 1500 V
Rated current *1	±120 A	±30 A

*1. Limited by the maximum output power.

Item	PXT20K-500	PXT20K-1500
Maximum settable voltage	525 V	1575 V
Setting accuracy	±(0.2 % of setting + 0.1 % of rating)	
Setting resolution	0.05 V	0.1 V
Power fluctuation *1	±100 mV	±300 mV
Load variation *2	±250 mV	±750 mV
Remote sensing Maximum compensation voltage (reciprocating) (TYP)	10 % of rating	
Internal resistance setting upper limit	5250 mΩ	63000 mΩ
Internal resistance setting resolution	1 mΩ	5 mΩ
Response switching	FAST, SLOW	
Slew rate switching	25 V/ms	75 V/ms
	12.5 V/ms	37.5 V/ms
	1.25 V/ms	3.75 V/ms
	0.125 V/ms	0.375 V/ms
Slew rate setting accuracy	±(20 % of setting + 2.5 ms)	
Transient response *3	6 ms or less	
Ripple noise *4	p-p *5	700 mV
	rms *6	100 mV
Rise time *7	Full load *8	25 ms
	No load	25 ms
Fall time *9	Full load *8	25 ms
	No load	750 ms

*1. 180 Vac to 252 Vac for 200 Vac input, 342 Vac to 504 Vac for 400 Vac input. At the constant load.

*2. The amount of change that occurs when the load is changed from no load to full load (rated output power/rated output voltage) with rated output voltage. The value is measured at the sensing point.

*3. The amount of time required for the output voltage to return to a value within the rated output voltage ± (0.1 % + 10 mV) when the response setting of the CV mode is FAST. The load current fluctuation is 50 % to 100 % of the maximum current with the set output voltage.

*4. In the case where the CV mode response setting is FAST and having the rated output current. Values measured using JEITA RC-9131C probe and 100:1 probe.

*5. Measurement frequency band: 10 Hz to 20 MHz

*6. Measurement frequency band: 10 Hz to 1 MHz

*7. Applicable to the case where the CV mode response setting is FAST and the rated output voltage changes from 10 % to 90 %.

*8. For a pure resistance.

*9. Applicable to the case where the CV mode response setting is FAST and the rated output voltage changes from 90 % to 10 %.

Item	PXT20K-500	PXT20K-1500
Maximum settable current	126 A	31.5 A
Setting accuracy	±(0.75 % of rating)	
Setting resolution	0.01 A	0.002 A
Power fluctuation	±240 mA	±60 mA
Load variation	±240 mA	±60 mA
Rise time (Short-circuit) (TYP) *1	25 ms	
Fall time (Short-circuit) (TYP) *2	5 ms	
Response switching	FAST, SLOW	
Slew rate switching (TYP)	6 A/ms	1.5 A/ms
	3 A/ms	0.75 A/ms
	0.3 A/ms	0.075 A/ms
	0.03 A/ms	0.0075 A/ms
Slew rate setting accuracy	±(20 % of setting + 2.5 ms)	

*1. In the case that the CC mode response setting is set to FAST: Applied in response to changes from 10 % to 90 % of rated output current.

*2. In the case that the CC mode response setting is set to FAST: Applied in response to changes from 90 % to 10 % of rated output current.

Item	PXT20K-500	PXT20K-1500
Maximum settable power	21000 W	
Setting accuracy *1	±(0.5 % of power rating + 0.5 % of current rating × Vout)	
Setting resolution	2 W	

*1. Equal to or higher than 5 % of the rated power is guaranteed. Less than 5 % of the rated power is guaranteed as a TYP value.

Specifications

Item	PXT20K-500	PXT20K-1500
Nominal input rating	200 Vac to 240 Vac, 50 Hz to 60 Hz	
Input voltage range	180 Vac to 252 Vac	
Input frequency range	47 Hz to 63 Hz	
Input current (MAX) *1	80 A (When Input voltage is 180 V)	
Input power (MAX) *1	24 kVA	
Inrush current (TYP) *2	90 A	
Power factor (TYP) *1	0.96	
Output hold time	10 ms or more	

*1. At the rated output power for the rated output current.

*2. Maximum peak current value when the POWER switch is turned on. (Excluding the surge current to the input filter capacitor.)

Item	PXT20K-500	PXT20K-1500
Nominal input rating	380 Vac to 480 Vac, 50 Hz to 60 Hz	
Input voltage range	342 Vac to 504 Vac	
Input frequency range	47 Hz to 63 Hz	
Input current (MAX) *1	40 A (When Input voltage is 342 V)	
Input power (MAX) *1	24 kVA	
Inrush current (TYP) *2	70 A	
Power factor (TYP) *1	0.96	
Output hold time	10 ms or more	

*1. At the rated output power for the rated output current.

*2. Maximum peak current value when the POWER switch is turned on. (Excluding the surge current to the input filter capacitor.)

Item	PXT20K-500	PXT20K-1500	
Voltmeter	Maximum display	±600.00 V	±1800.00 V
	Display accuracy	±(0.1 % of reading + 0.2 % of rating)	
Ammeter	Maximum display	±168.000 A	±42.000 A
	Display accuracy	±(0.75 % of rating)	
Wattmeter	Maximum display *1	±24.000 kW	
	Display accuracy	Display the integrated value of voltmeter and ammeter	
Operation display	Output ON / OFF	The OUTPUT LED on the front panel lights in green	
	Operation mode	Indicate the followings on the upper left part of the display CV: Green CV icon CC: Red CC icon CP: Orange CP icon	
	Remote (LAN)	Indicate the followings on the upper left part of the display Not connected: Red LAN icon Preparing for connection: Orange LAN icon Connected: Green LAN icon	
	Alarm	Indicate the details of activated protection function on the display	
	SCPI error	Indicate the error occurring at present on the display	
	POWER off	Indicate residual charge warning and an instruction to turn off the display, then reboot	
	Key lock	Indicate the key lock status on the upper right part of the display	
	Sensing	When sensing is enabled, indicate the sensing icon on the upper right part of the display	
	During parallel operation	Displaying the slave state on the slave unit	
	External control	When digital input/output is enabled, indicate the EXT icon on the upper right part of the display	
	While a sequence is running	Indicate the RUN icon on the upper right part of the display	
	Synchronization state	Indicate the Sync icon on the upper right part of the display	
	Output delayed	Indicate a yellow mark on the upper left part of the display	

*1. The unit will be W if it is less than 10 kW.

Specifications

Item		PXT20K-500	PXT20K-1500
OVP (overvoltage protection)	Protection operation	Output off, indicate "OVP" on the display. SLV OVP is displayed on the slave unit.	
	Setting range	50 V to 550 V	150 V to 1650 V
	Setting accuracy	±(0.1 % of setting + 0.2 % of rating)	
	Setting resolution	0.05 V	0.1 V
OCP (overcurrent protection)	Protection operation	Output off, indicate "OCP" on the display. SLV OCP is displayed on the slave unit.	
	Setting range	12 A to 132 A	3 A to 33 A
	Setting accuracy	±(0.75 % of rating)	
	Setting resolution	0.01 A	0.002 A
OPP (overpower protection)	Protection operation	Output off, indicate "OPP" on the display. SLV OPP is displayed on the slave unit.	
	Setting range	2 kW to 24 kW	
	Setting accuracy	±(1.0 % of power rating + 1.0 % of current rating × Vout)	
	Setting resolution	2 W	
UVP (undervoltage protection)	Protection operation	Output off, indicate "UVP" on the display. SLV UVP is displayed on the slave unit.	
	Setting range	0 V to 500 V	0 V to 1500 V
	Selectable	Enable/Disable	
	Setting accuracy	±(0.1 % of setting + 0.2 % of rating)	
	Setting resolution	0.05 V	0.1 V
Watchdog Alarm (Communication error protection)	Protection operation	Output off, indicate "WDOG" on the display	
	Setting range	1 s to 3600 s	
	Selectable	Enable/Disable	
External Alarm LOW Level (external input alarm detection)	Protection operation	Output off, indicate "EXT LOW" on the display	

● Protection Specifications HIGH alarm An alarm requiring a reboot to be cleared.

Item		PXT20K-500	PXT20K-1500
Reverse Alarm (Reverse-connection detection protection)	Protection operation	Output off, indicate "REVE" on the display	
OHP (Overheat protection)	Protection operation	Output off, indicate "OHP" on the display. SLV OHP is displayed on the slave unit.	
Line OVP (Grid overvoltage protection)	Protection operation	Output off, indicate "LOVP" on the display. SLV LOVP is displayed on the slave unit.	
	Setting range	Input voltage rating 200 Vac model: 200 V to 258 V Input voltage rating 400 Vac model: 380 V to 516 V	
Line UVP (Grid undervoltage protection)	Protection operation	Output off, indicate "LUVP" on the display. SLV LUVP is displayed on the slave unit.	
	Setting range	Input voltage rating 200 Vac model: 175 V or less. Input voltage rating 400 Vac model: 333 V or less.	
Line Frequency Error (Grid abnormal frequency protection)	Protection operation	Output off, indicate "FREQ" on the display. SLV FREQ is displayed on the slave unit.	
	Detection value	42 Hz/68 Hz	
External Alarm HIGH Level (External input alarm detection)	Protection operation	Output off, indicate "EXT HIGH" on the display	
Parallel Communication Error (Parallel operation communication error detected)	Protection operation	Output off, indicate "PARA COM" on the display	
Para Other Slave Alarm (Parallel operation slave error occurred)	Protection operation	Output off, indicate "SLV OTHR" on the display	
Incorrect Slave Alarm (Not applicable device connected)	Protection operation	Output off, indicate "SLV INC" on the display	
Too many connections (Too many parallel connections)	Protection operation	Output off, indicate "TOO MANY" on the display	
Hardware ERR *1 (Hardware error)	Protection operation	Output off, indicate "ERRH" on the display. SLV ERRH is displayed on the slave unit.	
Software ERR *2 (Software error)	Protection operation	Output off, indicate "ERRS" on the display. SLV ERRS is displayed on the slave unit.	

*1. It occurs when an abnormality related to the hardware is detected and the internal unit comes to an emergency stop.

*2. It occurs when an abnormality related to the software is detected and the internal unit comes to an emergency stop.

Item		PXT20K-500	PXT20K-1500	
Input	Input points	2 points		
	Voltage (CV) external voltage control	Setting range	0 % to 100 % of the rated output voltage	
		Input voltage range	0 V to +5 V or 0 V to +10 V (Selectable)	
		Accuracy	±(1 % of rating)	
	Current (CC) external voltage control, power (CP) external voltage control *1	Setting range	0 % to 100 % of the rated current and rated power	
		Input voltage range	0 V to +5 V or 0 V to +10 V (Selectable)	
Accuracy		±(1 % of rating)		
Output	Output points	2 points		
	Voltage monitor (VMON) Current monitor (IMON)	Output range	0 % to 100 % of the rated output voltage	
		Output voltage	0 V to 5 V or 0 V to 10 V (Selectable)	
		Accuracy	±(1 % of rating)	

*1. Select either current control or power control.

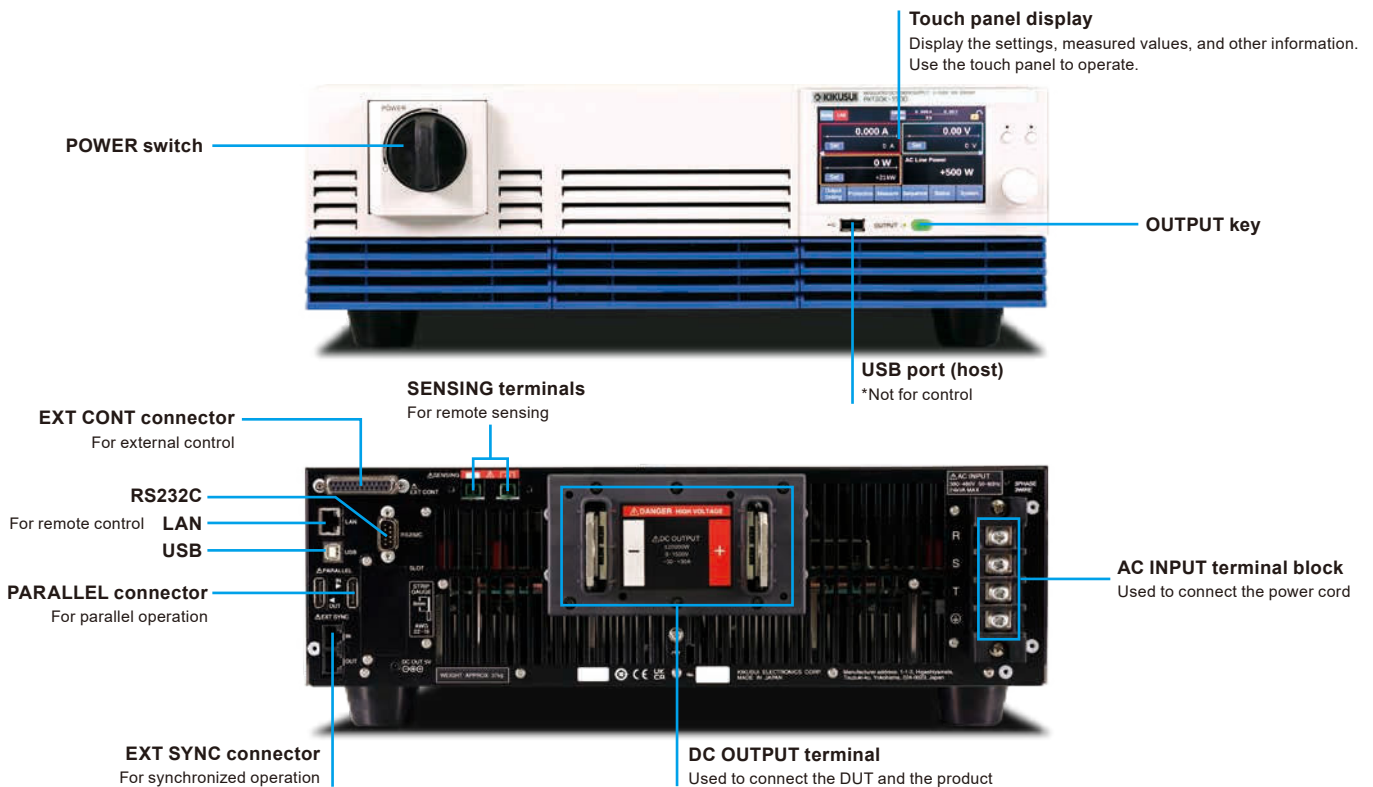
Specifications

● External digital input

Item		PXT20K-500	PXT20K-1500
Fixed input points			1 point (Polarity switchable)
Selected input points			5 points (Polarity switchable)
Input form		Photocoupler isolated input (Applicable to both current sink / source output)	
Fixed function	ALARM IN		HIGH alarm occurrence
	OFF		Do not use terminals
	OUTPUT ON		Turn on the output
	OUTPUT OFF		Turn off the output
	OUTPUT CTRL		Turn on or off the output
Selecting function	LALARM IN		LOW alarm occurrence
	ALARM CLR		LOW alarm clearance
	SEQ RUN		Sequence start/end
	SEQ PAUSE		Sequence pause/resume
	SEQ TRIG IN		Input the trigger for sequence
	ACQUIRE TRIG		Input the measurement trigger
	MEM1 RECALL		Recall preset memory 1
	MEM2 RECALL		Recall preset memory 2
	INTEG CTRL		Starting/stopping integration measurement
	INTEG RESET		Resetting integration measurement data
External circuit power supply range		12 V to 24 Vdc (±10 %)	

Item		PXT20K-500	PXT20K-1500
Output points			6 points (Polarity switchable)
Output form			Semiconductor relay output
Selecting function	OFF		Do not use terminals
	OUTPUT ON		Outputting the signal while the output is ON
	POWER ON		Signal is output when power supply is on and output is possible
	H ALARM OUT		Output a signal when a HIGH alarm occurs
	LALARM OUT		Output a signal when a LOW alarm occurs
	CC STATUS		Output a signal when operating in the CC mode
	CV STATUS		Output a signal when operating in the CV mode
	SEQ STATUS		Output the trigger for sequence
	SEQ TRIG OUT		Signal is output while the sequence is running
	EXT DIN BUSY		Output a signal when the digital input is in BUSY status
	MEM1 ACT TIME		Signal is output when the setting is completed for preset memory 1
	MEM2 ACT TIME		Signal is output when the setting is completed for preset memory 2
	RELAY DRIVE		Output a signal after approx. 100 ms in step with on/off of the DC OUTPUT terminal output. You can set this parameter to only Ch.6.

Panel Explanation



Specifications

Item		PXT20K-500	PXT20K-1500
Common specifications	Software protocol	IEEE std. 488.2-1992	
	Command language	Complies with SCPI Specification 1999.0	
RS232C	Hardware	D-SUB 9-pin connector Baud rate: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps Data length: 8 bits, Stop bits: 1 bit, Parity bit: None Flow control: No, CTS-RTS	
	Program message terminator	LF during reception, LF during transmission	
USB (device)	Hardware	Standard type B socket, Complies with the USB 2.0 specifications; data rate: 480 Mbps (high speed)	
	Program message terminator	LF or EOM during reception, LF + EOM during transmission	
	Device class	Complies with the USBTMC-USB488 device class specifications	
USB (host)	Hardware	Standard type A socket, Complies with the USB 2.0 specifications; data rate: 480 Mbps (high speed)	
LAN	Hardware	IEEE 802.3 100BASE-TX or 10BASE-T Ethernet	
	Communication protocol	SCPI-RAW, SCPI-Telnet, HiSLIP, VXI-11	
	Program message terminator	SCPI-RAW: LF during reception, LF during transmission HiSLIP: LF or END during reception, LF + END during transmission	
	Compliant standards	LXI Version 1.5 Specifications 2016	

Others

Item		PXT20K-500	PXT20K-1500	
Synchronization function (clock synchronization)	Overview	SYNC icon is displayed on the display when synchronization is established with the internal clock after connecting with other PXT series using the EXT SYNC connector.		
	Sequence synchronization	Synchronization of the program start and step start		
	Measurement synchronization	Synchronization of the measurement start		
	Output synchronization	Synchronization of output ON/OFF		
Sequence function	Operation mode	CV, CC, and CP modes		
	Maximum number of programs	30		
	Maximum number of steps	10000		
	Step execution time	1 ms to 3600000 s		
Output-on/off delay function	Loop count	1 to 100000, or infinite		
	Setting range	0.0 s to 99.9 s		
Over current protection (OCP) delay function	Setting resolution	0.1 s		
	Setting range	1 ms to 2000 ms		
Multichannel (VMCB) function	Setting resolution	1 ms		
	Connection between the master unit and a PC	LAN, USB, RS232C		
	Connection with slave units	LAN		
Measurement trigger	Measurement start condition (trigger source)	Conditions for starting measurement can be selected (when inputting from display, when inputting commands by remote control, when inputting signals by external control, and when operating in synchronization)		
	Number of measurements	1 to 65536		
	Measurement delay time	Setting range	0 s to 100 s	
		Setting resolution	0.1 ms	
	Measurement interval	Setting range	0.1 ms to 3600 s	
		Setting resolution	0.1 ms	
	Measurement time	Setting range	0.1 ms to 1 s	
Setting resolution		0.1 ms		
I-V characteristic function	Operation mode	CV/CC mode		
	Number of setup items	3 to 100 items (interpolated between points with straight lines)		
Preset value Memory	Number of memory entries	20		
	Saved setting	Values in CV, CC, and CP modes, protection function values, IR values, bleeder, and output delay setting.		
	Number of memory entries	21		
Setup Memory		On/off of the output from the DC OUTPUT terminal Output voltage value/Output current value/Output power value Output mode Response Slew Rate Priority operation mode (Priority when output is ON) Bleeder Output delay		
	Saved setting	Number of I-V characteristics (Count) Internal resistance value (IR) Over voltage protection (OVP) Under voltage protection (UVP, UVP Enable) Over current protection (OCP, Delay) Over power protection (OPP) Line overvoltage protection (Line OVP) Measurement trigger settings (Source, Count, Delay, Enable, Timer) Integration settings (Gate, Reset)		
Key Lock	Level 1	Output on/off and preset memory recall are available		
	Level 2	Output on/off are available		
	Level 3	Output off is available		
Number of units in parallel operation		Up to 10 units		

Specifications

Item	PXT20K-500	PXT20K-1500	
Weight	Approx. 38 kg (83.78 lbs)	Approx. 37 kg (81.57 lbs)	
Dimensions	430 (16.93)(MAX455 (17.91))W×128 (5.04)(MAX160 (6.30))H×720 (28.35)(MAX980 (38.58))Dmm(mm (inches)) Refer to Outline Drawing		
Environmental conditions	Operating environment	Indoor use, Overvoltage category II	
	Operating temperature	0 °C to +50 °C (32 °F to +122 °F)	
	Operating humidity	20 % rh to 85 % rh (no condensation)	
	Storage temperature	-25 °C to +60 °C (-13 °F to +140 °F)	
	Storage humidity	90 % rh or less (no condensation)	
Altitude	Up to 2000 m		
Cooling system	Forced air cooling using fan		
Accessories	AC INPUT terminal cover, External control connector kit (1 set), Chassis connection wire, DC OUTPUT terminal cover, DC OUTPUT terminal screws (1 pair), EXT SYNC connector cover, SENSING connector cover, SENSING connector (2 pieces), Synchronized operation signal cable kit, Safety Information (1 copy), China RoHS sheet (1 copy), Getting Started Guide (1 copy), Heavy object warning label (1 piece)		
Withstand voltage	Between input and GND	2200 Vac for 1 minute	
	Between input and output		
	Between output and GND	1800 Vdc for 1 minute	3000 Vdc for 1 minute
Insulation resistance	Between input and GND	30 MΩ, 500 Vdc	
	Between input and output	30 MΩ, 1000 Vdc	
Isolation voltage	±1000 V		+2000 V/-1000 V
Electromagnetic compatibility (EMC) *1 *2	Complies with the requirements of the following directive and standards. EMC Directive 2014/30/EU EN 61326-1 (Class A *3)		
Safety *1	Complies with the requirements of the following directive and standards. Low Voltage Directive 2014/35/EU *2 EN 61010-1 (Class I *4, Overvoltage category II, Pollution Degree 2 *5)		

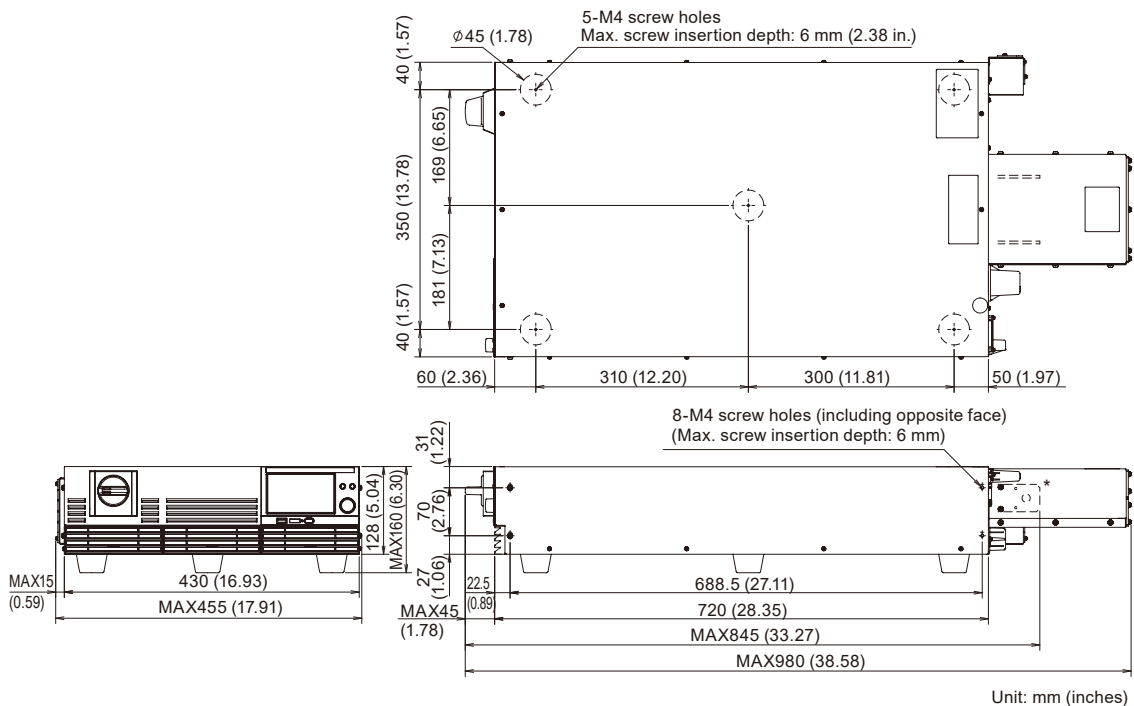
*1. Does not apply to specially ordered or modified products.

*2. Only for models with CE marking / UKCA marking on their body.

*3. This is a Class A instrument. This product is intended for use in an industrial environment. This product may cause interference if used in residential areas. Such use must be avoided unless the user takes special measures to reduce electromagnetic emissions to prevent interference to the reception of radio and television broadcasts.

*4. This is a Class I instrument. Be sure to ground this product's protective conductor terminal. The safety of this product is guaranteed only when the product is properly grounded.

*5. Pollution is addition of foreign matter (solid, liquid or gaseous) that may produce a reduction of dielectric strength or surface resistivity. Pollution Degree 2 assumes that only non-conductive pollution will occur except for an occasional temporary conductivity caused by condensation.



Unit: mm (inches)

* The number of bus bars varies depending on the model.

Ordering Information

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Options

- Parallel operation signal cable kit
PC01-PXB (Cable length: 1.5 m)

Model name	Length	Maximum allowable current	Terminal size	Applicable models
DC80-2P3M-M10M10	3 m	200 A	M10/M10	PXT20K-500
HV22-2P3M-M12M8		80 A	M12/M8	PXT20K-1500

Model name	Length	Nominal cross-sectional area	Terminal size	Applicable models
AC22-4P3M-M6C-4S	3 m	22 mm ²	M6	All models



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