

## PMX-A SERIES



PMX-A mascot Pobby

# Compact DC Power Supply **PMX-A Series**

Compact, high-performance series regulator system LAN (LXI compliant) / USB / RS232C as standard interface Free downloads (Limited function edition) of "Wavy" sequence creation software



A standard feature of the networking capability provides extended applications of the ordinary testing.

# New-generation of the compact power supply **PNX-A Series**





- Series regulator system with excellent noise performance
- High setting resolution Voltage: 1 mV, Current: 0.1 mA (PMX18-2A)
- Wide range of output variations (9 models are available)
- LAN (LXI compliant) / USB / RS232C as standard interface
- External analog remote control
- Monitoring and status signal output
- CV, CC priority start function (to prevent overshoot when the output is ON)
- Remote sensing function (18V, 35V models)
- Key lock, 3-point preset memory function

The PMX-A series is a compact, high-performance DC power supply that provides constant voltage (CV) and constant current (CC). It is designed to improve working efficiency for benchtop uses. For this purpose, the output terminals are located on the front panel and are ergonomically designed so that wiring harnesses for electrical loads can be connected by moving your fingers naturally. Moreover, a forced air cooling system is used to intake and exhaust of the internal air, so the unit can be rack mounted without space. Furthermore, the PMX-A is equipped with LAN, USB, and RS232C interfaces as standard interfaces required for system operation. In particular, the LAN interface enables you to control and monitor the power supply from Web browsers on PCs, smartphones, tablets, and other terminal devices. Moreover, the PMX-A is LXI (LAN eXtention for Instru-

mentation) certified product, so it can be connected easier with your measurement system using LAN interface. The PMX-A is also equipped with remote sensing (for 18V, 35V models only), analog external control/monitoring output, various protective functions, memory function, and other functions.



The Safety cover is included for the model above 70V output rating.





#### Series line-up

	Ou	tput	Rip	ple	Line Re	gulation	Load Re	gulation	Dimensions	Weight	Power Source	Power Consumption
Model	CV	CC	CV	CC	CV	CC	CV	CC	Tura	he / lb e	AC	Approx.
	V	A	mVrms	mArms	mV	mA	mV	mA	Туре	kg / Ibs	V±10%	VA
PMX18-2A	0 to 18	0 to 2	0.5	1	±1	±5	±2	±5	I	5 / 11.02	100	150
PMX18-5A	0 to 18	0 to 5	0.5	2	±1	±5	±5	±5	I	6 / 13.23	100	310
PMX35-1A	0 to 35	0 to 1	0.5	1	±3	±5	±3	±5	I	5 / 11.02	100	150
PMX35-3A	0 to 35	0 to 3	0.5	1	±3	±5	±4	±5	I	6 / 13.23	100	310
PMX70-1A	0 to 70	0 to 1	1	1	±5	±2	±5	±5	Π	6 / 13.23	100	230
PMX110-0.6A	0 to 110	0 to 0.6	2	1	±7	±2	±7	±5	Π	6 / 13.23	100	210
PMX250-0.25A	0 to 250	0 to 0.25	3	1	±15	±1	±15	±5	Π	6 / 13.23	100	210
PMX350-0.2A	0 to 350	0 to 0.2	5	1	±25	±1	±25	±5	Π	6 / 13.23	100	230
PMX500-0.1A	0 to 500	0 to 0.1	10	1	±30	±1	±30	±3	Π	6 / 13.23	100	170

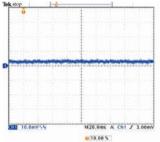
### **Communication interfaces are standard features**





PMX-A SERIES

#### Series regulator system with excellent noise performance



#### High stability and Low Ripple Noise

The PMX-A is based on the capacitorinput type of the series regulator design and which output can be generated with low noise and low ripple compared to the switching regulator design.

 Ripple waveform (PMX18-5A)
 [Measurement Condition] Resistive Load, Oscilloscope in 20MHz bandwidth

#### Improved usability





The handle makes you easy to carry

Ergonomically designed for the wiring load harness

### Free downloads of "Wavy" sequence creation software

The limited function of the optional sequence creation and control software "SD025-PMX (Wavy for PMX)" is available to be downloaded free of charge. For details, please refer to the following information and our WEB. \* The number of steps is limited up to 5 steps.

### Application Software

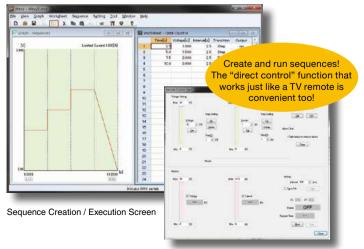
Sequence Creation Software SD025-PMX (Wavy for PMX)

#### The software that supports to the auto testing of the power supply. And it allows you to create and edit sequence data easily using a mouse !

The SD025-PMX (Wavy for PMX) is an application software that supports sequence creation and the operation of the Kikusui power supplie and the electronic load. The "Wavy" software allows you to create and edit sequences visually using a mouse without programming knowledge. It enables you to control the power supply in much the same way as remote controller for such monitoring the voltage and current, logging and so on.

#### [Operating environment, conditions]

- The "Wavy" software can control only one unit of the power supply.
- CPU:Recommended: Core2 or better
- CD-ROM: Reguired to install the "Wavy"
- Mouse: Reguired
- Monitor: 1024 x 768 dots or higher resolution
- Memory: 2GB or more
- Interfaces: LAN, USB, RS232C



Direct Control Screen



# Digital, analog and other various external controls are supported. Remote control and monitoring can also be performed from Web browsers!

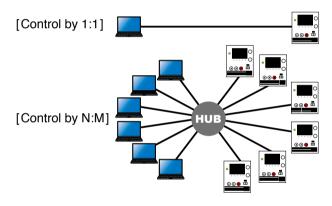
USB Interface

The PMX-A series is equipped with LAN, USB, and RS232C interfaces as standard communication interfaces. These interfaces enable remote control and monitoring to be performed efficiently in 1-to-N node configurations as well as in N-to-M node configurations even under large-scale networks. In particular, the LAN interface enables you to control and monitor the power supply through a browser on the PC, smartphone, tablet, or other terminal devices by accessing the built-in Web server of the PMX-A series.

### LAN Interface

The LAN interface can control the number of devices with high speed, and it's theoretical controllable maximum number is to be calculated by approximately 4.2 billion. (The maximum transmission speed varies by the number of connected devices) In accordance with its applied standard, it is possible to combine the device that is to control or to be controlled, it is also the feature that it can be used with various applications. Also, in computers installed with Apple Bonjour, it is possible to access with a host name instead of the IP address.

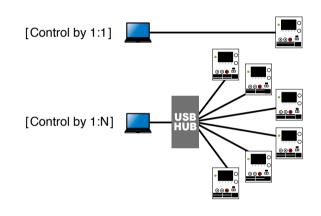
• AUTO MDIX function: The PMX-A series can automatically identify the type of LAN cable whether straight or cross is connected and it connects using the appropriate method.



### RS232C Interface

It can be used for communication with PCs and sequencers.





The USB interface has a feature of high versatility, and the ease of

a setup. The automatic recognition by the plug and play releases a user from the complex setting operation under the digital control.

and it can be suitable interface when control by 1:1. In accordance

with the standard, the maximum number of the connected devices can be configured up to 127 units. Moreover, the USB interface of

the PWX series complies to USB2.0, and it has realized transmission

speed of a maximum of 12 Mbps (es) (Full Speed).

### Easy access with the built-in web server

Use a browser from a PC, smartphone, or tablet to access the web server built into the PMX-A series for convenient control and monitoring.

#### [Recommended browser]

- Requires for the Internet Explorer version 9.0 or later
- Requires for the firefox 8.0 or later
- Requires for the safari / mobile Safari 5.1 or later
- Requires for the Chrome 15.0 or later
- Requires for the Opera 11.0 or later
- \* Connecting with a smartphone, tablet, etc. requires a Wi-Fi environment (wireless LAN router etc.).







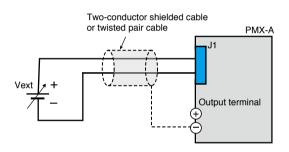
### Analog Interface

The PMX-A series is equipped with external voltage/resistance control, which are interfaces necessary for analog external control and monitoring applications for test power supply devices. The input external signal and the output status signal can be conducted through the J1 connector on the rear panel.

#### • Controlling the Output Voltage & Output Current.

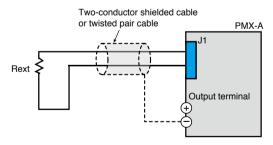
[Control using an external voltage(Vext)]

It is possible to control the output voltage and output current of the PMX-A series by using an external voltage.



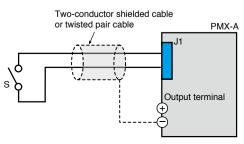
#### [ Control using an external resistance(Rext)]

It is possible to control the output voltage and output current of the PMX-A series by using an external variable resistor.

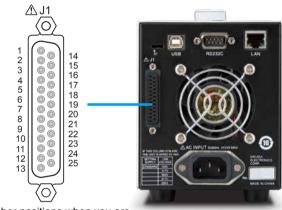


#### • Turning output on and off [Control using an external contact (S)]

It is possible to turn the output ON/OFF of the PMX-A series by using an external contact.



#### J1 connector pin arrangement



Pin number positions when you are facing the rear panel

Pin No.	Signal name	Description
1	VMON	Output voltage monitor; outputs 0 V to 10 V for 0 % to 100 % of the rated output voltage.
2	IMON	Output current monitor; outputs 0 V to 10 V for 0 % to 100 % of the rated output current.
3	ACOM	External signal common for pins 1, 2, 4, and 14. *1
4	EXT-V CV CONT	Output voltage control using external voltage; receives 0 V to 10 V to output 0 % to 100 % of the rated voltage.
5	ACOM	External signal common for pins 1, 2, 4, and 14. *1
6	EXT-R CV CONT	Output voltage control using external resistance; uses 0 $\Omega$ to 10 k $\Omega$ to output 0 % to 100 % of the rated voltage.
7	EXT-R CV CONT COM	Common for output voltage control using external resistance.
8	N.C.	Not connected.
9	N.C.	Not connected.
10	N.C.	Not connected.
11	CV STATUS	On when the PMX series is in CV mode (open-collector output from a photocoupler).*2
12	CC STATUS	On when the PMX series is in CC mode (open-collector output from a photocoupler).*2
13	ALM STATUS	On when a protection function (OVP, OCP, or OHP) is activated (open-collector output from a photocoupler).*2
14	EXT-V CC CONT	Output current control using external voltage; receives 0 V to 10 V to output 0 % to 100 % of the rated current.
15	ACOM	External signal common for pins 1, 2, 4, and 14.1*1
16	EXT-R CC CONT	Output current control using external resistance; uses 0 $\Omega$ to 10 k $\Omega$ to output 0 % to 100 % of therated current.
17	EXT-R CC CONT COM	Common for output current control using external resistance.
18	OUT ON/OFF CONT	Output on/off control using external contact input.
19	DCOM	External signal common for pin 18.*1
20	N.C.	Not connected.
21	N.C.	Not connected.
22	N.C.	Not connected.
23	OUT ON STATUS	On when output is on (output through an open-collector photocoupler).*2
24	PWR ON STATUS	On when the power is on (output through an open-collector photocoupler).*2
25	STATUS COM	Status signal common for pins 11, 12, 13, 23, and 24.

\*1. During remote sensing, this is the negative electrode (-S) of sensing input.

When remote sensing is not being performed, this isconnected to the negative output.

\*2. Open collector output: maximum voltage 30 V, maximum current (sink) 8 mA; the status common is floating (isolation voltage or less), it is isolated from the control circuit.

## Specifications

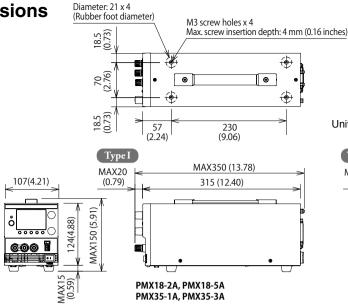
	Model		PMX18-2A	PMX18-5A	PMX35-1A	PMX35-3A	PMX70-1A	PMX110-0.6A	PMX250-0.25A	PMX350-0.2A	PMX500-0.1A		
AC input Nominal input	rating					100 Vac *1	, 50 Hz / 60 Hz, s	ingle phase					
Input voltage range							± 10 %						
	nput frequency range			1	r	1	47 Hz to 63 Hz		T		1		
Inrush current	. ,			60 Amax or less									
Power (MAX) * Output	-3		150 VA	310 VA	150 VA	310 VA	230 VA	210 VA	210 VA	230 VA	170 VA		
Output	Output voltage		18.00 V	18.00 V	35.00 V	35.00 V	70.00 V	110.0 V	250.0 V	350.0 V	500.0 V		
Rating	Output current		2.000 A	5.000 A	1.000 A	3.000 A	1.000 A	0.600 A	0.250 A	0.200A	0.100 A		
	Output power		36 W	90 W	35 W	105 W	70 W	66 W	62.5 W	70 W	50 W		
	Setting range		0 V to 18.90 V	0 V to 18.90 V	0 V to 36.75 V	0 V to 36.75 V	0 V to 73.5 V	0 V to 115.5 V	0 V to 262.5 V	0 V to 367.5 V	0 V to 525.0 V		
	Setting resolution	n *4		1	mV		2 mV		10	mV			
Setting accuracy			±1 mV	±1 mV	±3 mV	± (0.2 % ±3 mV	of setting +0.1 % ±5 mV	of rating) ±7 mV	±15 mV	±25 mV	±30 mV		
	Line regulation *		±1 mV ±2 mV	±1 mV ±5 mV	±3 mV	±3 mV ±4 mV	±5 mV	±7 mV ±7 mV	±15 mV	±25 mV ±25 mV	±30 mV		
	Transient respons		12 1114		) µs	14111	10 1117	17 1110	100 µs	120 111	100 111		
	Ripple noise (rms				mV		1 mV	2 mV	3 mV	5 mV	10 mV		
Voltage	Rise time *9			120 ms	s or less		150 ms or less	120 ms or less	120 ms or less	150 ms or less	120 ms or less		
	No load			120 ms	s or less		150 ms or less	120 ms or less	120 ms or less	150 ms or less	120 ms or less		
	Fall time *10	Rated load		1	or less	1	50 ms or less	50 ms or less	50 ms or less	80 ms or less	50 ms or less		
		No load	270 ms or less	320 ms or less	270 ms or less	270 ms or less	270 ms or less	120 ms or less	120 ms or less	220 ms or less	60 ms or less		
	Maximum remote compensation vo			0.	6 V				_				
	Temperature coeff						100 ppm / °C						
	Setting range		0 A to 2.1 A	0 A to 5.25 A	0 A to 1.05 A	0 A to 3.15 A	0 A to 1.050 A	0 A to 0.630 A	0 A to 0.263 A	0 A to 0.210 A	0 A to 0.105 A		
	Setting resolution	1*4		2 0.20 A	1 2	1 2.1.00.1074	0.1 mA						
	Setting accuracy				-	± (0.3 %	of setting +0.1 %	of rating)					
Current	Line regulation			±5	mA	· · · ·	±2 mA	±2 mA	±1 mA	±1 mA	±1 mA		
	Load regulation			±5	mA	· · · · · · · · · · · · · · · · · · ·	±5 mA	±5 mA	±5 mA	±5 mA	±3 mA		
	Ripple noise (rms	-	1 mA	2 mA	1 mA	1 mA			1 mA				
	Temperature coeff	icient (TYP)					200 ppm / °C						
Display functio			1			N		1	000.0 (// )				
Voltage display	Maximum display Display accuracy			99.9	9 (fixed decimal		% of reading +2	digite)	999.9 (fixed (	decimal point)			
	Maximum display						9 (fixed decimal p						
Current display	Display accuracy						% of reading +5 of						
	OUTPUT ON / O		Output on: OUTPUT LED lights in green.Output off: OUTPUT LED turns off.										
	CV operation		CV LED lights in green.										
	CC operation		CC LED lights in red.										
Operation	Alarm operation				ALARM L	ED lights in red w	hen a protection	function has bee	n activated.				
-	Remote operation	n	REMOTE LED lights in green during remote control.										
display		LAN operation	LAN LED lights or blinks depending on the LAN communication status.										
			No fault status: Lights in green.Fault status: Lights in red.Standby status: Lights in orange.WEB identify status: Blinks green.										
	Key lock operatio Preset memory	n					0		1. .ED lights in gree	2			
Protection fund					when a preset m	entory entry is be	ing used, the firm	, D, 01 0 1					
		Operation				Turns the output of	off, displays OVP,	and lights ALAR	vi				
		Setting	1.8 V to	1.8 V to	3.5 V to	3.5 V to	7 V to	11 V to	25 V to	35 V to	50 V to		
Overvoltage pro	otection (OVP)	range	19.8 V	19.8 V	38.5 V	38.5 V	77.00 V	121.0 V	275.0 V	385.0 V	550.0 V		
		-				10 % to 110	% of the rated o						
		Setting accuracy				<b>-</b>	± (1 % of rating)						
		Operation *12		0541	1	Turns the output of		-		0.000.4	0.010.0.1		
Overcurrent pro	otection (OCP)	Setting	0.2 A to 2.2 A	0.5 A to 5.5 A	0.1 A to 1.1 A	0.3 A to 3.3 A	0.100 A to 1.100 A	0.060 A to 0.660 A	0.025 A to 0.275 A	0.020 A to 0.220 A	0.010 A to 0.110 A		
- • • • • • • • • • • • • • • • • • • •		range					% of the rated o			1			
		Setting range					± (1 % of rating)	•					
Overheat prote	ection (OHP)	Operation		Turns the output off, displays OHP, and lights ALARM									
External Contr	rol • Signal output		"										
Monitor	Voltage monitor	At rated voltage output					10.00 V ±0.1 V						
signal output	(VMON)	At 0 V output					0.00 V ±0.1 V						
*13, *14	Current monitor (IMON)	At rated current output					10.00 V ±0.1 V						
	OUTON STATUS	At 0 A output		0.00 V ±0.1 V									
o	CV STATUS			Turns on when the output is on									
Status signal output	CC STATUS		Turns on during CV operation Turns on during CC operation										
*14, *15	ALM STATUS		Turns on when an alarm has been activated										
	PWR ON STATUS		Turns on when the power is turned on										
	EXT-V CV CONT			0 % to 100 % of the rated output voltage in the range of 0 V to 10 V.									
	(CV external voltage control) Accuracy		1 % of rating +10 mV 1 % of rating										
		EXT-R CV CONT (CV external resistance control) Accuracy				00 % of the rated	output voltage in	the range of 0 Ω					
				1 % of rating +10 mV 1 % of rating 0 % to 100 % of the rated output current in the range of 0 V to 10 V.									
External		EXT-V CC CONT		1 0/ of ret		100 % of the rate	a output current ii	n the range of 0 \					
*16	EXT-R CC CONT	(CV external voltage control) Accuracy		i 76 OF FAU	ng +10 mA 0 % to 1	00 % of the rated	output current in	the range of 0 O	1 % of rating to 10 kQ.				
	(CV external resistan			1 % of ratio	ng +10 mA				1 % of rating				
					<u> </u>	Por	sible logic selecti	one:					
	OUTPUT ON/OF			Turn the output on	using a LOW (0				a HIGH (4.5 V to !	5 V) or open-circu	it.		
	(Output on/off co	ntrol)		Turn the output or									
Other features	;		I										
Preset memory					Save u	p to 3 combinatio	ns of the voltage	and current settir	ng value.				
			Select fro	m the following th					÷	et memory A, B.	and C keys.		
Preset memory	у			m the following the op.	ree modes. Loc1:	Locks the operati	on of all keys exc	ept the OUTPUT	key and the pres				

### Specifications

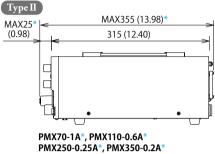
Interstores (minimuch)(ministrum dimensions)         107 (4217)W124 (489)(160 (5917) Ha35 (1240)(355           Environment         Interstores (worklight catagory)           Consign embrand         07 (4217)W124 (489)(160 (5917) Ha35 (1240)(355           Environment         0.7 (217)W124 (489)(160 (5917) Ha35 (1240)(355           Consign embrand         Deside (117)W124 (11		Model	PMX18-2A	PMX18-5A	PMX35-1A	PMX35-3A	PMX70-1A	PMX110-0.6A	PMX250-0.25A	PMX350-0.2A	PMX500-0.1A		
sentiation in the sential in the sen	rface												
Compliane with the IABADD specifications. Bod Life programments D-SUBM programmen		Software protocol				IE	EE Std 488.2-19	92					
Instance         Instance         Data rate: 1500 bysics. Data length: 3 bits, Bay bits: 1 bit, Parguin then, No like control.           USB         Poguam message terminator         L' d'urig tresplan, L' d'urig trespla,	cifications C	Command language											
NB3000         Program message terminator         LP during reception. LP during transmission           USB         Program message terminator         LP of CVM during reception. LF and during transmission           Device data         Complex with the USB 20 percifications. Board and rung transmission           Device data         EEE 602.3 1008been TX.1008bee TEID Data Complex with the USB 20 Percifications. Board and rung transmission           Complex with the USB 20 Percifications. Board and rung transmission         Complex with the USB 20 Percifications. Board and rung transmission           Complex relations         Program message terminator         VVX-11 and HILD LF or EVD during reception. LF + EVD during transmission           Complex relations         Program message terminator         VVX-11 and HILD LF or EVD during reception. LF + EVD during transmission           Complex relations         Programmetry Stage Percentary Stage Percenary Percentary Percentary Percentary Percenary Percentary	F	Hardware		_									
Hadware         Comprise with the USB 2.0 specification. Band rate 12 Maps (ull specif). Standard Type B socked           USB         Program message terminator         Life of EOM during reception. (Life Action Specification 2011 Rev 1.4.           UND         Program message terminator         USD 11 Model Standard Type 1 Socked           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW           Communication protocio         USD 11 Model Standard Type 2 SOFHAW			Baud rate: 19200 bps fixed, Data length: 8 bits, Stop bits: 1 bit, Parity bit: None, No flow control.										
USB Program massage terminator Device cleas	F	Program message terminator	LF during reception, LF during transmission										
Draw         Complex with the USETWC-USB486 device dues specification:           LNN         Hiddware         IEEE 62.3 10058er.EX.108.ex.FE Internet Complex with LN DWork Sector Specification 2011 Rev 1.4.           Complex with the USETWC-USB486 device dues specification:         Complex with the USETWC-USB486 device dues specification:           Complex with the USETWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Complex with the USETWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Complex with the USETWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Complex with the USETWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Displex device dues specification:         Complex with the USBTWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Displex device dues specification:         Complex with the USBTWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Displex device due to the USBTWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Displex device due to the USBTWC-USB486 device dues specification:         Complex with the USBTWC-USB486 device dues specification:           Displex device due to the USBTWC-USB486 device dues dues due to the USBTWC-USB486 de	F	Hardware		Comp	olies with the USE	2.0 specification	s. Baud rate:12 N	Abps (full speed).	Standard Type B	socket			
Device class         Complex with the USBINC-USBIAB device class specification:           LAN         IEEE 602.3 10008eer.TV.108eer.FEP.WL           Complex with the USBINC-USBIAB device class specification: 2011 Rev 1.4.           Program message terminator         Complex with the USBINC-USBIAB device class specification: 2011 Rev 1.4.           Program message terminator         Complex with the USBINC-USBIAB device class specification: 2011 Rev 1.4.           Program message terminator         Appointment of the USBINC-USBIAB device class specification: 2011 Rev 1.4.           Program message terminator         Appointment of the USBINC-USBIAB device class specification: 2011 Rev 1.4.           Definition of the USBINC-USBIAB device class specification: 2011 Rev 1.4.         With 11 ret 4440.PE LE de rSDI devices respecification: 2011 Rev 1.4.           Definition of the USBINC-USBIAB device class specification: 2011 Rev 1.4.         Program message terminator           Definition of the USBINC-USBIAB device class specification: 2011 Rev 1.4.         Program message terminator           Definition of the USBINC-USBIAB device class specification: 2011 Rev 1.4.         Program message terminator           Complex with Rev 1.4.         Program message terminator         Program message terminator           Complex with Rev 1.4.         Program message terminator         Program message terminator           Complex with Rev 1.4.         Program message terminator         Program message terminator	3 F	Program message terminator	LF or EOM during reception. LF + EOM during transmission										
Hedware         IEEE 602.3 1008me TX/ 108me TEhrmat Counsilias Mt. XU Donot Consequences of 11 Rev 1.4.           LAN         Communication poteoid         VXX-11, 148U,P. or SCP-RAW           Communication poteoid         VXX-11, 148U,P. or SCP-RAW         Pagementsion           Differencements         Pagementsion SCP-RAW         Pagementsion SCP-RAW         VXX-11, 148U,P. or SCP-RAW           Differencements         Pagementsion SCP-RAW         VXX-11, 148U,P. or SCP-RAW         Pagementsion SCP-RAW         VXX-11, 148U,P. or SCP-RAW           Differencements         Pagementsion SCP-RAW         Pagementsion SCP-RAW         VXX-11, 148U,P. or SCP-RAW         VXX-11, 148U,P. or SCP-RAW           Differencements         Pagementsion SCP-RAW         Pagementsion SCP-RAW         VXX-11, 148U,P. or SCP-RAW													
LAN         Implicitation	L	Device class											
LAN         Communication protocol         VXH-11 HISUP of SCPF-RAW           Program message terminator         VXH-11 HISUP of SCPF-RAW         Feature genetization           General specifications         Appointed y Sta         Ap	F	Hardware											
Integrat message attributed         SCPF-AAW: LF during monitories, LF during transmission           Weight (main unit only)         Appointantly 5 is Appointant 5 is Appointant 1 interve 5 is Appointant 1 interve 5 is Appointerve 5 is Appointant 1 interve 5 is Appointant 1 interve 5 is	ı c	Communication protocol											
Control         SUP-MAYL Product State         Super-Mark Product State         Compounding tablemation           Weight (main unit only)         Approximately 50 (13.20.21.5)	-	Dragrom magazine terminator			VXI-11 and H	iSLIP: LF or END	during reception	, LF + END durin	g transmission				
Weight (main unit only)         Agesammately is in Agesammately is in Agesam					S	CPI-RAW: LF dur	ing reception, LF	during transmiss	ion				
weight (minum um only)         (11.02 kb)         (13.23 kb)	eral specifica	ations	A	A	Accession for the first sector	A	A	A	1				
Operating environment         Index use, verve/dage category II           Incommonded         Cort of C 10 S+th 0 S+th 0 condensation (13 T+ b+196 T)           Storge treatment / Storge	ght (main uni	it only)								Approximately 6 kg (13.23 lbs)	(13.23 lbs)		
Operating environment         Indoor use, everyating ensigning marking           Controlling in the service of the section of the sectin of the section of the section of the section of the	ensions (mm	n(inch))(maximum dimensions)											
Bonge inspeating / Songe humidity         -28 °C to +70 °C / 90 %th or less (fro continuation) (13 °F to +188 °F)           Colling method         Forced air cosling using fin           Control presenting of the second of the secon				(, ( (									
Alture         Up to 2000 m           Cooling method         Force dia recoling using fan           Grounding optarity         APO Vdc	ironmental	Operating temperature / Operating humidity			0 °C to +4	40 °C / 20 %rh to	85 %rh (no cond	ensation) (32 °F t	io +104 °F)				
Conting method         Forced air conting using fan           Conting method	ditions S	Storage temperature / Storage humidity			–25 °C to	+70 °C / 90 %rh	or less (no conde	ensation) (-13 °F 1	to +158 °F)				
Grounding polarity         Negative grounding possible           Withstand Voltage         2:70 Vdc         1:500 Vdc for 1 minute           Between input and GD         2:70 Vdc         No abnormalities at 2100 Vac for 1 minute           Between input and GD         No abnormalities at 2100 Vac for 1 minute         No abnormalities at 2000 Vac for 1 minute           Detween input and GD         S00 Vdc, 30 MQ or more         1000 Vdc, 30 MQ or more         1000 Vdc, 30 MQ or more           Between output and FG         Complex with the requirements of the following directive and standard. Low Voltage Directive 2006 / 95 / EC EN 61010-1 (Class I *20), EN 61020-32, EN 61000-32, EN 61000-33, Applicable under the following conditions           Complex with the requirements of the following directive and standards. EM Directive 2006 / 95 / EC EN 61010-1 (Class I *20), EN 6100-32, EN 61000-32, EN 61000		Altitude					•						
isolation voltage         ±70 Vdc         ±550 Vdc           Withstand Between input and output         No abnormalities at 1500 Vac for 1 minute           Between input and output         No abnormalities at 2000 Vac for 1 minute           Between input and output         No abnormalities at 2000 Vac for 1 minute           Between input and output         500 Vdc, 30 MQ or more         1000 Vdc, 30 MQ or more           Between output and FG         Complex with the requirements of the following directive and standard. EMO Directive 2006 / 108 / 52 CE NE 61010-11 (Class 1*20, Complex with the requirements of the following directive and standards: EMO Directive 2006 / 108 / 52 CE NE 61010-11 (Class 1*20, Complex with me requirements of the following conditions           Electromagnetic compatibility *19         Complex with num length of all cables and and the MVL and the Linead to a more than a the standard Low Voltage Directive 2006 / 108 / 52 CE NE 6100-33           Applicable under the following conditions         The maximum length of all cables and and the MVL and the Linead to a more than a the standard to the MPLX A must be less than 3 m.           Accessories         Power cord: 1 pc (Approximately 25 m). Packing list: 1 copy. Cubic reference: Japanese: 1 copy. English: 1 copy. Chickes 1: Safety precutions: 1 copy. Cubic reference: Japanese: 1 copy. English: 1 copy. Chickes 1: Safety precutions: 1 copy. Cubic reference: Japanese: 1 copy. English: 1 copy. Chickes 1: Safety precutions: 1 copy. Cubic reference: Japanese: 1 copy. English: 1 copy. Chickes 1: Safety precutions: 1 copy. Cubic reference: Japanese: 1 copy. English: 1 copy. Cubic reference: Japanese: 1 copy. Licke and the	-						-	-					
Between input and FG         No abnormalities at 2000 Vac for 1 minute           Between input and GG         No abnormalities at 2100 Vac for 1 minute           Between input and FG         No abnormalities at 2100 Vac for 1 minute           Between input and FG         No abnormalities at 2000 Vac for 1 minute           Between input and FG         S00 Vdc, 30 M2 or more           Between input and FG         Complex with the requirements of the following directive and standard.Low Voltage Directive 2006 /95 /EC EN 61010-1 (Class I *20).           Safety *19         Complex with the requirements of the following directive and standard.Low Voltage Directive 2006 /95 /EC EN 61010-1 (Class I *20).           Electromagnetic compatibility *19         Complex with the requirements of the following directive and standard.Low Voltage Directive 2006 /95 /EC EN 61010-3.           Accessories         Power cord: 1 pc (Approximately 2,5 m). Packing list: 1 copp. Culines: 1 approximate index	÷.	ity		+70	Vdo	Negative ground	aing or positive gr	ounding possible					
Withstand         Between input and output         No abnormalities at 2100 Vac for 1 minute           Between input and GPG         No abnormalities at 2000 Vac for 1 minute         No abnormalities at 2000 Vac for 1 minute           Between input and output         Between input and output         1000 Vac, 30 MQ or more         1000 Vac, 30 MQ or more           Between input and output         Complies with the requirements of the following directive and standard.Low Voltage Directive 2006 / 55 / EC E N6 1010-1 (Class I *20, Complies with the requirements of the following continos and standards EMC following directive and standards EMC following directive and standards EMC following directive and standards EMC following continos and standards EMC following settings and output is an output is standard in the following settings and continos.           Links specified otherwise, the specifications are for the following settings and continos.         -1         117 Vac, 200 Vac 217 Vac and 234 Vac are factory options.           Links specified otherwise, the specifications are for the following settings and contains.         -1         -1         117 Vac, 200 Vac 17 Vac and 234 Vac are factory options.           Links specified otherwise, the specifications are for the following settings and output output values indicated by "Trading" are readout values.         -1         117 Vac, 200 Vac 17 Vac are 204 Vac are 1		Between input and EG		±70	Vuc	No abnorm:	l alities at 1500 Var	for 1 minute	±330 Vuc				
Voltage         Between rouput and FG         No abnormalities at 1800 Vac for 1 minute         No abnormalities at 2000 Vac for 1 minute           Insulation         Between input and FG         South of the second	nstand												
Insulation Between output and FG         500 Vdc; 30 MQ or more         1000 Vdc; 30 MQ or more           Safety *19         Complies with the requirements of the following directive and standards. EWC Directive 2006 / 95 / EC EN 61010-1 (Class 1*20, Complies with the requirements of the following directive and standards. EWC Directive 2004 / 108 / EC           Electromagnetic compatibility *19         Power cord: 1 pc (Approximately 2.5 m). Packing list: 1 copy. Claics 4*21, Group 1*22), EN 61000-3-3. Applicable under the following conditions.           Accessories         Power cord: 1 pc (Approximately 2.5 m). Packing list: 1 copy. Claics 4*21, Group 1*22), EN 6100-3-3. Applicable under the following conditions.           Loads an pruc resistive loads.         Power cord: 1 pc (Approximately 2.5 m). Packing list: 1 copy. Claics 4*21, Class 4*	age 🛏		No	abnormalities at	1600 Vac for 1 mi	nute		No abnorma					
Detween rupput and output         Doublet, 30 ML of more         Doublet, 30 ML of more           Safety *19         Complies with the requirements of the following directive and standards Exclose and standards		Between input and FG											
Safety *19         Complex with the requirements of the following directive and standard. Low Voltage Directive 2006 / 95 / EC EN 61010-1 (Class 1*20, Complex with the requirements of the following directive and standards. EMC Directive 2004 / 108 / EC           Electromagnetic compatibility *19         Complex with the requirements of the following directive and standards. EMC Directive 2004 / 108 / EC           Electromagnetic compatibility *19         Power cord: 1 pc (Approximate/2.5 m). Placking list: 1 copy, Culck reference: Japanese: 1 copy, English: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy, Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy. Chinese: 1 Safety precautions: 1 copy. Culck reference: Japanese: 1 copy. Culck	stance		500 Vdc, 30 MΩ or more 1000 Vdc, 30 MΩ or more										
Complies with the requirements of the following directive and standards ISM C Directive 2004 / 108 / EC Electromagnetic compatibility '19 Complies with the requirements of the following directive and standards ISM C Directive 2004 / 108 / EC EN 613261 (Class A '2), Class / 2), Cliss / 100-3-2, EN 6100-3-2, EN 6100-3-3 Applicable under the following conditions The maximum length of all cabling and wring connected to the PMX-A nust be less than 3 n. Accessories Power cord: 1 pc (Aproximately 2.5 m), Packing list: 1 copy, Cuick reference: Japanese: 1 copy, English: 1 copy, Chinese: 1 Safety precautions: 1 copy. CD-FOM: 1 disc. The warm-up line is 30 minutes (with current flowing). The warm-up line is 30 minutes (with current flowing). Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with current flowing). Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with current flowing). Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with current flowing). Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with current flowing). Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with near doubut values exist. Nuese finded by 'TYP' are typical values. The warm-up line is 30 minutes (with near doubut values exist. Nuese finded by caterol values. The warm-up line is 30 minutes (with the output is on, hold down SHIFT and turn the VOLTAGE or CURRENT kn at 10th the ecolution of the minimum digt. The warm of updage during the set to a value greater than or equal to the nearbony which no cupture current flows. In other words, effers to a lead here the to a value greater than or equal to no tool are double values. The ward output values exist. No back fleers to a lead here the output values exist. No back fleers to a reactive load flue the value greater than or equal to no the maximum output values with a trate output values. The ward output values with neard output values with a read output values with a read to		Between output and FG											
Safety precautions: 1 copy, CD-ROM: 1 disc.  1. In the same pure resistive loads. 1. Leads are pure resistive loads. 1. Leads are pure resistive loads. 1. Leads are pure resistive loads. 1. Autions is 30 minutes (with current flowing). 1. Negative output is connected to the chassis terminal using the short bar. 1. Values indicated by "TTPP" are typical values. 1. Values indicated by "reating" are readout values. 1. Values indicated that, when the read output current 1. Values indicated that, when the read output cu	ctromagnetic	compatibility *19	EN 61326-1 (Class A *21), EN 55011 (Class A *21, Group 1 *22), EN 61000-3-2, EN 61000-3-3 Applicable under the following conditions The maximum length of all cabling and wiring connected to the PMX-A must be less than 3 m.										
<ul> <li>Loads are pure resistive loads.</li> <li>"2. Excludes the charge current component that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimmediately and the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent that flows through the capacitor of the intimude the protocomponent terms and the protocomponent terms at the component terms of the intimude the protocomponent terms at the component terms of the intimude terms at the component terms at the component terms at the component terms at</li></ul>	essories		Po	ower cord: 1 pc (A	pproximately 2.5 m)				copy, English: 1 co	opy, Chinese: 1 co	ру.		
the voltage drop to 10 % of the maximum output voltage with rated output current or 1 V whichever is higher. *15. Photocoupler open collector output; maximum voltage 30 V, maximum current (sink) 8 mA; isolated from the output an commons are floating (isolation voltage or less); and status signals are not mutual *16. J1 connector on the rear panel. *17. Use a cross cable (null modern cable). *18. Category 5; use a straight cable. *19. Limited to products that have the CE mark on their panels. Does not apply to modified PMX-As. *20. This is a Class I equipment. Be sure to ground this product's protective conductor	ds are pure res warm-up time jative output is jes indicated by jes indicated by les indicated by les indicated by ed load and no nstant-voltage e maximum out d load: Refers to s the flowing c rated output vo ad: Refers to a s to an open los instant-current i e maximum out d load: Refers to d load: Refers to s to an open los instant-current i e maximum out d load: Refers to oltage drop to s ooltage drop to s ooltage drop to so	sistive loads. is 30 minutes (with current flowing). is connected to the chassis terminal usis by "TYP" are typical values. They are no y "rating" are rated values. by "reading" are readout values. b) cad are defined as follows: mode (when the output current is set t typut current with rated output voltage) to a resistive load that, when the rated current 95 % to 100 % of the maximum oltage. a load through which no output current ad (no load being connected). mode (when the output voltage is set t tput voltage with rated output output current to a resistive load that, when the rated 95 % to 100 % of the maximum output t. ge drop in the load cables, the PMX-A co	ng the short bar. ot guaranteed perfo to a value greater th I output voltage is a n output current flows. In other word to a value greater th I output current flow t voltage with putput voltage putput current.	<ul> <li>*2. Excludes the charge current component that flows through the capacitor of the immediately after the POWER switch is turned on (for approximately 1 ms).</li> <li>*3. With the rated load.</li> <li>*4. When the output is on, hold down SHIFT and turn the VOLTAGE or CURRENT at 1/10th the resolution of the minimum digit. When the output is of, hold down SHIFT and turn the VOLTAGE or CURRENT at increments of 1 in the minimum digit. If you are setting the value through the communication interface, you can s resolution of the minimum digit. If you are setting the value through the communication interface, you can s resolution of the minimum digit. To Vac to 90 Vac or 100 Vac to 110 Vac, rated load.</li> <li>*5. 100 Vac to 90 Vac or 100 Vac to 110 Vac, rated load.</li> <li>*6. The amount of change that occurs when the load is changed from no load to ra voltage is applied, output voltage is applied.</li> <li>*6. The amount of change that occurs when the load is changed from no load to ra voltage. The value is measured at the sensing point.</li> <li>*7. The amount of time required for the output voltage to return to a value within " % + 10mV). When the load current is changed from 10 % to 100 % of the rating where "10. The time it takes for the output voltage to rise from 10 % to 90 % of the rating where "10. The time it takes for the output voltage to fail from 90 % to 10 % of the rating where "10. The time it takes for the output voltage current peak that is generated from PMX-A output section when the load is changed suddenly.</li> <li>*13. When remote sensing is used. connect the monitor signal's common line to "10. The time is take store the load is changed suddenly.</li> </ul>						1 ms). or CURRENT knob or CURRENT knob e, you can set the is on. n no load to rated lo value within "rated out % of the rated outp he rating when the o the rating when the o enerated from the o	to change the va to change the va value at 1/10th output voltage±(0 utput voltage±(0 utput is turned output is turned capacitors inside gative S termina		
this product is only guaranteed when the product is properly grounded.			with rated output			*15. Photoc maximu commo *16. J1 conr *17. Use a c *18. Catego *19. Limited modifie *20. This is	bupler open collector m voltage 30 V, mans are floating (isole tector on the rear pross cable (null mo ry 5; use a straight to products tat I d PMX-As. a Class I equipmen	or output; ximum current (sini ation voltage or less anel. dem cable). cable. nave the CE mark t. Be sure to ground	s); and status signal on their panels. D d this product's prot	ls are not mutually i loes not apply to s ective conductor te	solated.		

- \*21. This is a Class A equipment. 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.
  \*22. This is a Group 1 equipment. This product does not generate and/or use intentionally radio-frequency energy, in the from of electromagnetic radiation, inductive and/or capacitive coupling, for the treatment of material or inspection/analysis purpose.

### Dimensions



Unit: mm (inches)



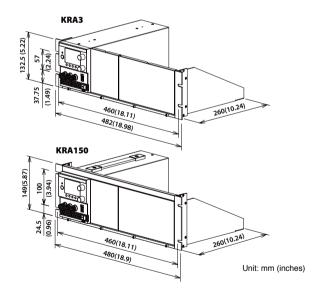
PMX250-0.25A\*, PMX350-0.2 PMX500-0.1A

\* The model specified above is equipped with the safety cover, so the maximum depth is different from the other models.

### Option

Name	Model	Note		
Rack mount adapter	KRA3	For EIA inch racks		
nack mount adapter	KRA150	For JIS millimeter racks		
	KBP3-2 (1/2 width)	For both EIA inch racks		
Blank panel	KBP3-4(1/4 width)	and JIS millimeter racks		
Dialik pariel	BP191(-M) *1	For EIA inch racks		
	BP1H(-M) *1	For JIS millimeter racks		

\*1 The "-M" at the end of the model name indicates a mesh type.



Name	Model	Note
Connector kit	OP01-PMX	A connector kit for connecting to the J1 connector to externally control the PMX.
Terminal unit (for use with the PMC-A series)	TU01-PMX	A terminal unit for converting the J1 connector of this product to the J2 connector of the Kikusui PMC-A Series Regulated DC Power Supply.

🙆 KIKUSUI

KIKUSUI ELECTRONICS CORPORATION 1-1-3, Higashiyamata, Tsuzuki-ku, Yokohama, 224-0023, Japan Phone: (+81) 45-593-7570, Facsimile: (+81) 45-593-7571, www.kikusui.co.jp

KIKUSUI AMERICA, INC.1-877-876-2807 www.kikusuiamerica.com 2975 Bowers Avenue, Suite 307, Santa Clara, CA 95051 Phone: 408-980-9433 Facsimile: 408-980-9409

KIKUSUI TRADING (SHANGHAI) Co., Ltd. www.kikusui.cn Room 216,Building 4, No.641,Tianshan Road, Shanghai City, China Phone : 021-5887-9067 Facsimile : 021-5887-9069 For our local sales delitibutors and representatives, please refer to 'sales network' of our website. •Distributor/Representative

All products contained in this catalogue are equipment and devices that are premised on use under the supervision of qualified personnel, and are not designed or produced for home-use or use by general consumers. Specifications, design and so forth are subject to change without prior notice to improve the quality. Product names and prices are subject to change and production may be discontinued when necessary. Product names, company names and brand names contained in this catalogue ergresent the respective registered trade name or trade mark. Colors, textures and so forth of photographs shown in this catalogue may differ from actual products to a limited fidelity in printing. Mithough every effort has been made to provide the information as accurate as possible for this catalogue, etrain details have unavoidably been omitted due to limitations in space. If you find any misprints or errors in this catalogue, and inform such and prevent to unditable to unditable.