

Intelligent Power Control

Catalog Number	Full Load	Receptacles	Circuit Breaker	EMI/RFI Filter	Surge Suppression	Input Plug	Cord (ft)	Ethernet Control	Serial Control (RS232)	Dimensions (H x W x D, in)
IPC3401	1920 VA @ 120V~ 3840 VA @ 240V~	(8) C13	(2) 20A	20A	270V	C20 Inlet	Power cables must be ordered separately. Refer to page 43 for power cable options.	No	Yes	1.7 x 19.0 x 9.5
IPC3401-NET	1920 VA @ 120V~ 3840 VA @ 240V~	(8) C13	(2) 20A	20A	270V	C20 Inlet		Yes	Yes	1.7 x 19.0 x 9.5
IPC3402	1920 VA	(8) 5-15R	(1) 20A	20A	270V	C20 Inlet		No	Yes	1.7 x 19.0 x 9.5
IPC3402-NET	1920 VA	(8) 5-15R	(1) 20A	20A	270V	C20 Inlet		Yes	Yes	1.7 x 19.0 x 9.5
IPC3402-A2	1920 VA	(8) 5-20R	(1) 20A	20A	270V	C20 Inlet		No	Yes	1.7 x 19.0 x 9.5
IPC3402-A2-NET	1920 VA	(8) 5-20R	(1) 20A	20A	270V	C20 Inlet		Yes	Yes	1.7 x 19.0 x 9.5
IPC3402-2756	2880 VA	(4) 5-20R, (4) 5-15R	(1) 20A, (1) 10A	N/A	270V	L5-30P	10	Yes	Yes	1.7 x 19.0 x 9.5
IPC3402-2930	2880 VA	(8) 5-15R	(1) 20A, (1) 10A	N/A	270V	L5-30P	10	Yes	Yes	1.7 x 19.0 x 9.5

Please refer to page 43 for power cable assemblies to match your country specific requirements.

(11) Indicator lights

- Main power to system-CB on
- Individual power on to outlets 1-8
- Data acquisition and remote disable

Remote or local control

- Serial RS232 port (DB9 Male) for direct computer or modem connection
- RS485 input/output for strapping up to 10 systems together over CAT.5 cable
- Local: one on/off switch for each outlet
- NET SYSTEMS ONLY: RJ45 for network connections (Ethernet)

Remote disable

With the push of a button, disable remote access to the IPC when needed

Power supply

The IPC3401 series features a full range power supply for operation at 100-240 Vac input/output

EMI/RFI filtering

- Common mode - line to ground
- Differential mode - line to line
- Filtered inlet isolates noise before entering the system
- Refer to chart 3 on page 40
- IPC3402-2756 and IPC3402-2930 do not have filtering

Spike/surge suppression (TVSS)

- Line to line
- Refer to chart 1 on page 40
- Multi-stage, both MOVs and SAPs

Outlet status

- Query the IPC for Outlet and Watch Dog status

Strapping

- Strapping allows up to 10 IPCs (80 outlets) to be controlled at one address
- Units are connected together via the RS485 "IN" and "OUT" connectors

Multiple time delay (MTD)

- Sequence power up and power down to outlets with a one second time delay (factory set)
- Set power on sequence to any combination of outlets
Set the MTD timing from 1 second to 999 seconds, i.e. 009 = 9 seconds



Software controls

- Multi-platform compatible
- Control via terminal emulation software
- Web interface for browser control

Commands available

- All outlets on/off or specific outlets on/off
- Set up and sequence on/off all outlets
- Create password and unit address
- Outlet naming (8 characters)
- Set up, enable or disable Watch Dog
- Display outlet and Watch Dog timer status
- Automatically receive update outlet status whenever there's a change
- Auto-reboot outlet 1 with a five-second delay on restart

Intelligent Power Control IPC3600 Series

Catalog Number	Full Load	Ethernet/ Serial	Receptacles	Circuit Breaker	EMI/RFI Filter	Surge Suppression	Input Plug	Cord (ft)	Dimensions (H x W x D, in)
IPC3601 	1920 VA @ 120V~ 3840 VA @ 240V~	Yes	(8) C13	(1) 20A	20A	Yes	C20 Inlet	Not Included	1.7 x 19.0 x 19.5
IPC3602 	1920 VA	Yes	(8) 5-15R	(1) 20A	20A	Yes	C20 Inlet	Not Included	1.7 x 19.0 x 19.5
IPC3601-F3-3316	5760 VA	Yes	(8) C13	(2) 15A	No	Yes	L6-30P	10	1.7 x 19.0 x 19.5



(12) Indicator lights

- Main power system on
- Power on to outlets 1-8
- Two data and ethernet link

EMI/RFI filtering

- Common mode - line to ground
- Differential mode -line to line
- Filtered inlet isolates noise before entering the system
- Refer to chart 4 on page 40

Spike/surge suppression

- Line to neutral (or line)
- Refer to chart 1 on page 40

Serial/ethernet

- Serial RS232 via RJ22 connector on the rear. 6' RJ22 to DB9 cable included
- Serial baud rate is 9600 default or 38,400 maximum
- Ethernet (10/100) network via RJ45 connector on the rear. 6' network cable included
- Network setup allows DHCP or any static public/private IP address

Software interfaces

- Web interface provides a graphic control interface through a Web browser
- Telnet interface provides a text menu control interface with any terminal emulation software
- SNMP allows read/write capability with trapping
- Email notification system provides email alerts or logs showing user activity

- Serial interface provides a text menu control interface with any terminal emulation software
- FTP utility allows firmware upgrades

Software security

- User name/password security
- Settings allow the administrator to disable unused interfaces


Software features

- Administrator and multiple users can be configured
- User level access can be limited to specific outlets
- Unit and outlet names can be configured
- Outlet groups can be created to perform an action on multiple outlets
- Outlet control includes individual, group and all outlet global control
- Outlet actions include on or off and reboot
- Global sequence allows all the outlets to be turned on or off in a preset sequence up to 999 seconds
- Outlet reboot automatically turns an outlet off and back on with one command at a preset time up to 999 seconds
- Email notification allows up to two email addresses to receive notifications of alerts or events

Auto-event scheduling

Administrator can configure on or off events for outlets or groups. The event occurs at the preset time daily or weekly.

Intelligent Power Control IPC3400 series

Catalog Number	Full Load	Receptacles	EMI/RFI Filter	Surge Suppression	Cord (ft)	Power Input Plug	Serial Control (RS232)	Ethernet Control	Dimensions (H x W x D, in)
IPC3400-A1	1440 VA	(4) 5-15R	15A	270V	9	5-15P	Yes	No	3.4 x 9.0 x 5.8
IPC3400-A1-NET 	1440 VA	(4) 5-15R	15A	270V	9	5-15P	Yes	Yes	3.4 x 9.0 x 5.8
IPC3400-AB	1440 VA/2880 VA	(4) C13	15A	270V	8	C14	Yes	No	3.4 x 9.0 x 5.8
IPC3400-AB-NET	1440 VA/2880 VA	(4) C13	15A	270V	8	C14	Yes	Yes	3.4 x 9.0 x 5.8



IPC3400-A1-NET

(6) Indicator lights

- (1) Main power
- (1) Data light
- (4) Power on to outlets 1-4

Communications

- RS232, Serial: 9600 baud only
- Optional ethernet control via RJ45 connector (add -NET to part number)
- Data terminal emulation software is required to communicate with the IPC internal command codes such as telnet or hyperterminal

EMI/RFI filtering

- Common mode - line to ground
- Differential mode - line to line
- Refer to chart 2 on page 40

Spike/surge suppression

- L-N, L-G, N-G
- Refer to chart 1 on page 40

Outlet status

Query the IPC for Outlet and Watchdog status, i.e. outlets are (on or off)

Multiple time delay (MTD)

- Turn outlets on or off at one time
- Sequence power up and power down to outlets 1 - 4 with a four-second time delay (factory set)
- Set power on sequence to any combination of outlets
- Set the MTD timing from one second to 999 seconds, i.e. 009 = 9 seconds

Password protection

For added security, a password feature is included which allows you to assign a three alphanumeric character password

Addressing

The IPC comes with a default address but you can also create your own with any four alphanumeric characters

Watch-dog/auto-reboot

- The IPC monitors the control connection and automatically reboot itself if the connection locks up. The auto-reboot is activated by the time-out period running down to zero. When this occurs the IPC shuts down all outlets for four seconds and restart in the default or user defined sequence
- Set the time out period to any number 0-9 where each digit represents 30 seconds, i.e. 3 = 120 seconds (user defined)

Commands available

- All outlets on/off
- Individual outlet on/off
- Set up and sequence on/off all outlets
- Create password and unit address
- Name outlets with eight character name
- Set up, enable or disable Watchdog
- Display outlet and Watchdog timer status

Industrial ePDUs environmental, surge suppression and EMI/RFI filter performance

Chart 1:

TVSS (Transient Voltage Surge Suppression) MOV Specifications			
Continuous AC Voltage	150 Vac	270 Vac	320 Vac
Continuous DC Voltage	200 Vdc	360 Vdc	420 Vdc
Max. DC Leakage	200 μ A	200 μ A	200 μ A
Low Varistor Voltage Limit	212 Vdc	389 Vdc	462 Vdc
High Varistor Voltage Limit	243 Vdc	453 Vdc	540 Vdc
Nominal Varistor Voltage	236 Vdc	424 Vdc	503 Vdc
Current For Varistor Voltage	1 mA	1 mA	1 mA
Max. Clamp Voltage 8x20 μ s	360V	680V	810V
Max. Clamp Voltage Test Current	100A	100A	100A
Peak Current Rating (1 Pulse)	12000A	10000A	10000A
Peak Current Rating (2 Pulse)	9000A	6500A	6500A
Energy Rating (10x1000 μ s)	170J	325J	385J
Energy Rating (8x20 μ s)	170J	325J	385J
Capacitance	1700 pF	970 pF	820 pF
Impulse Response Time	50 ns	50 ns	50 ns

Chart 2: 001-3000

EMI/RFI Filtering Common Mode Insertion Loss				
Mhz.	.2	1.0	2.0	10.0
dB.	15	25	45	50

Differential Insertion Loss				
Mhz.	.2	1.0	2.0	10.0
dB.	10	22	32	50

Chart 3: 010-0317

EMI/RFI Filtering Common Mode Insertion Loss						
Mhz.	.01	1	10	20	50	100
dB.	8	29	40	50	68	40

Differential Insertion Loss						
Mhz.	.01	1	10	20	50	100
dB.	8	23	45	58	32	28

Chart 4: 025-2023

EMI/RFI Filtering Common Mode Insertion Loss						
Mhz.	.15	.50	1.0	5.0	10.0	30.0
dB.	6	19	28	42	45	50

Differential Insertion Loss						
Mhz.	.15	.50	1.0	5.0	10.0	30.0
dB.	6	6	30	50	30	30

Chart 5: 025-3021

EMI/RFI Filtering Common Mode Insertion Loss						
Mhz.	.15	.50	1.0	5.0	10.0	30.0
dB.	6	19	28	42	45	50

Differential Insertion Loss						
Mhz.	.15	.50	1.0	5.0	10.0	30.0
dB.	2	40	60	65	57	55

Chart 6: 025-2833

EMI/RFI Filtering Common Mode Insertion Loss							
Mhz.	.1	.5	1.0	5.0	10.0	20.0	50.0
dB.	18	40	48	62	80	70	60

Differential Insertion Loss							
Mhz.	.1	.5	1.0	5.0	10.0	20.0	50.0
dB.	21	33	41	50	50	50	50

Chart 7: 025-4000

EMI/RFI Filtering Common Mode Insertion Loss						
Mhz.	.05	.20	1.0	5.0	20.0	100.0
dB.	0	35	71	75	66	48

Differential Insertion Loss						
Mhz.	.05	.20	1.0	2.0	5.0	10.0
dB.	20	30	72	63	58	51

Chart 8: 025-3031

EMI/RFI Filtering Common Mode Insertion Loss						
Mhz.	.05	.15	.50	1.5	5.0	20.0
dB.	4	18	38	44	50	50

Differential Insertion Loss						
Mhz.	.05	.15	.50	1.5	5.0	20.0
dB.	12	20	40	60	50	50