

PC5200 v2.0 Installation Instructions

Power Supply Module

The PC5200 can be used to provide up to 1.0A of additional current to the compatible DSC Alarm Controllers, models PC5010, PC5015, PC5020, PC1864, PC1832 and PC1616. PC1616/1832/1864 v4.1 or higher supports up to four PC5200 modules.

This installation sheet shall be used with the Installation Manual of the DSC equipment to which the PC5200 is connected or powered from (e.g. alarm controller, power supply, etc.).

General

This product meets the requirements of Class II, Grade 2 equipment as per EN50131-1:2006+A1:2009, EN50131-3:2009 Type B, EN50131-6:2008 Type A.

Specifications

- Power Supply Type A as per EN50131-6 Standard
- Temperature range: -10°C to +55°C
- Relative Humidity: 93% non condensing
- Input ratings: 220V-240Vac, 50/60Hz, 200mA
- Transformer required, mounted in the same enclosure and permanently connected

NOTE: For installations using the transformer mounted inside the cabinet, replace the fuse only with same type (20mm) rated 250V/315mA.

- Transformer secondary ratings: 16.5Vac, 40VA
- Board current draw: 20mA (set and unset state / alarm and non-alarm state)
- Board dimensions: 145 mm x 83 mm
- AUX output ratings: 12Vdc, -15%/+15% when Input voltage is between 85% to 110% of rated value and output current is between 0.0A - 1.0A max.
- Resettable fuse (PTC) used on circuit board instead of replaceable fuses
- Output ripple voltage: 600mVp-p max
- No Overvoltage protection devices required on the outputs
- Storage device: rechargeable battery, rated 12Vdc. Replace battery every 3-5 years
- Battery capacity: 4Ah, 7Ah or 14Ah (2 x 7Ah) max.
- Maximum standby time 24h (when using 14Ah battery capacity and AUX current limited to 480mA max. Refer to Table 1
- Recharging time: up to 80% in less than 72h
- Low battery trouble indication threshold 11.5Vdc
- Battery deep discharge protection (cut-off at 9.5Vdc)

NOTE: Main control panel and power supply shall be powered from the same AC mains circuit. Deep discharge protection works only when there is no voltage on the keybus connection.

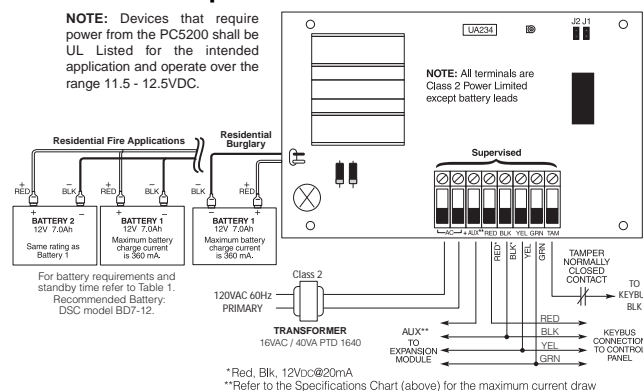
NOTE: For EN50131-6:2008 compliant installations, use only one 12V/7Ah battery for 12h of required standby time (550mA output current).

- Supervision for loss of primary power source (AC Fail) battery fail or battery low voltage (Battery Trouble) with indication provided on the keypad

Table 1

	UL Residential		UL Commercial	EN50131
	Burglary	Fire	Burglary	Grade 2 /Class 2
PC5200 Current Draw 20mA				
Max. Aux Current Draw @ 12VDC	1A	550mA	1A	550mA
Transformer Requirements	16V, 40VA	16V, 40VA	16V, 40VA	16.5V, 40VA (Mounted inside cabinet)
Battery Requirements	7Ah min	14Ah min (2x7Ah)	7Ah min	7Ah min
UL Listed Enclosures	PC500C	PC5003C (Household Fire & Burglary)	CMC-1 PC4050CAR	PC5003C PUC1
Standby Time (min.)	4 hours	24 hours	4 hours	12 hours

Terminal Descriptions



AC - Supervised, the PC5200 requires a 16V/40VA transformer. Connect the primary of the transformer to an unswitched AC source (maximum current draw is 0.5A) and connect the secondary of the transformer (US market only) to these terminals.

AUX+ - This terminal is used to provide power for devices & modules. Please refer to Table 1 for maximum ratings.

Connect the positive lead of powered devices to AUX and the negative to the proper output terminal (O1 to O4).

TAM - This can be used to tamper the cabinet in which the PC5200 is mounted. Connect a normally closed (NC) switch across TAM and BLK. If the tamper is not being used connect a piece of wire across TAM and BLK to remove the trouble condition.

Keybus - The 4-wire Keybus connection is used by the panel to communicate with the module. Connect the RED, BLK, YEL & GRN terminals to the RED, BLK, YEL & GRN Keybus terminals on the compatible control panel.

Enclosures

The PC5200 can be installed in the metal enclosures listed below:

- Model PC5003C (removable door) made of 22Ga steel, painted, dimensions: 248mm(L) x 298mm(W) x 76mm(H), weight: 1500g.
- Model PC5003C (hinged door) made of 1.2mm thick steel, painted, dimensions: 248mm(L) x 298mm(W) x 76mm(H), weight: 2500g
- Model Power UC1 made of 18Ga steel, painted, dimensions: 315mm(L) x 319mm(W) x 100mm(H), weight: 3150g.
- Model PC4003C made of 18Ga steel, painted, dimensions: 230mm(L) x 180mm(W) x 75mm(D), weight 1050g.

Tamper protection switches can be installed on all enclosures, including door opening protection and/or removal from the mounting position. Doors can be secured using screws or keylock. The PC5200 may be installed within the same metallic cabinet as the alarm controller/power supply (model Power UC1, PC5003C) or in a separate enclosure (model PC4003C). Internal and/or external wiring for this module shall be routed, supported, clamped or secured in a manner that reduces the likelihood of:

- excessive strain on wire and on terminal connections,
- loosening of terminal connections and
- damage of conductor insulation

NOTE: For EN50131-1 Grade 2 compliant installations, all unused holes on the side of the cabinet must be covered (plugged). Also, the security tape must be applied over the hinges of the removable door in order to prevent undetected access to the inside of the cabinet.

NOTE: The PC5200 power supply has been certified by Telefication according to EN50131-1:2006 + A1:2009 and EN50131-6:2008, for Grade 2, Class II, Type A when installed in PC5003C (removable door) enclosure.

PC5200 Jumper Settings

The PC5200 has 2 jumpers; to select which PC5200 slot is to be used refer to the table below.

Table 2

SLOT	J1	J2
PC5200 1	OFF	OFF
PC5200 2	ON	OFF
PC5200 3	OFF	ON
PC5200 4	ON	ON



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Warning: Digital Security Controls recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

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CAUTION: Changes or modifications not expressly approved by Digital Security Controls could void your authority to use this equipment.

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna
- Relocate the alarm control with respect to the receiver
- Move the alarm control away from the receiver
- Connect the alarm control into a different outlet so that alarm control and receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

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