Relay Interface Card for Powerware 9120 and 9170+

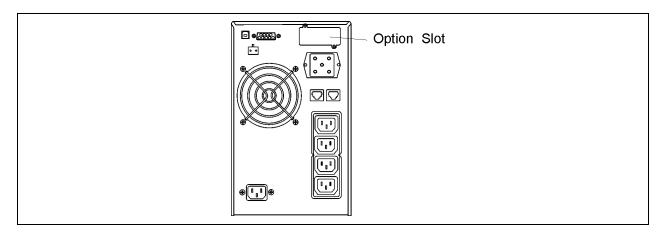
General

This Relay Interface Card (p/n 1014018) provides potential free true relay interface for AS/400 and other relay connected computers and industrial applications. This relay interface uses a 15-pin D-sub connector and this Relay Interface Card is installed in the slot on rear panel of the UPS.

Installation

The UPS does not have to be shut down when installing this Relay Interface Card.

- 1. Remove the cover on the option slot on the back of UPS to install the Relay Interface Card.
- 2. Put the Relay Interface Card into the slot and attach it to the rear panel by using the screws removed.



The following information is available from the Relay Interface Card:

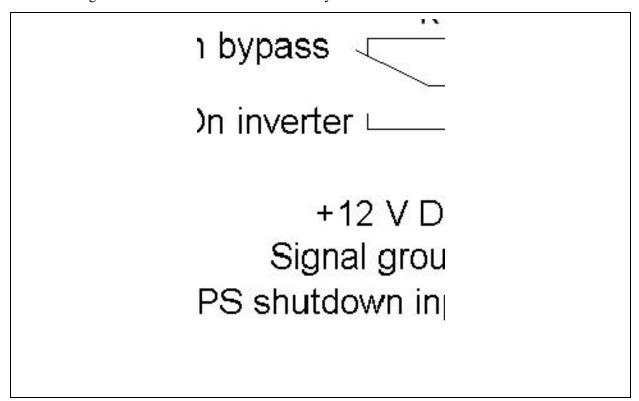


Table 1. Relay information available.

Relay #	System state	D15 pin #	NC / NO *
on board		connected	
K1: Line	Line OK	1 - 2	NC
	Line failure	1 - 3	NO
K2: Battery	Battery normal	4 - 5	NC
	Battery low	4 - 6	NO
K3: UPS Alarm	UPS alarm	7 - 8	NC
	UPS ON / OK	7 - 9	NO
K4: Bypass	UPS on bypass	10 - 12	NC
	UPS normal / On inverter	10 - 11	NO
	UPS shutdown **	13 - 15	

Table 1

NOTICE: The relay contacts must not be galvanically connected to any mains connected circuits. Do not use +12VCD (Pin13) of the Relay Interface Card for any power supply purposes for external devices. Reinforced insulation to the mains is required for equipment and cables connected to these connections.

The relay contacts are rated for maximum 1A/30VAC or 200mA/60VDC. All relay outputs are galvanically isolated from the other circuits of the UPS (IEC 950, EN 50091-1).

Shut down function

The Relay Interface Card shut down functionality depends on the jumper (JP1, JP2 & JP3) selected on the board and on the UPS mode (Normal or On Battery). The functions are described in table 2.

Table 2. Shut down options.

		JP1 (factory default)	JP2	JP3
PW	UPS	-	-	-
9110	Normal			
	On Battery	-	UPS Off immediately, back	-
	_		online when power returns.	
PW	UPS	-	Immediate output off, back	Immediate output off
9120	Normal		on line when shut down	
			pins are opened	
	On Battery	Shut down as in RS-232	. ,	Immediate output off
		port. Output off after 120	on line when shut down	
		sec, back on line when	pins are opened	
		power returns.		
PW	UPS	-	-	Immediate output off
9170+	Normal			
	On Battery	-	Immediate output off	Immediate output off

Table 2

^{*} Normally closed (NC) /open (NO) connection state when the Relay Interface Card is not powered.

^{**} The shutdown pin (15) needs minimum of 5 seconds high level signal (connection to +12VDC) to perform the UPS shutdown.