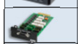
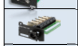
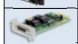
Hvad er Intern Statisk Bypass omskifter?
UPS-anlæg er i sagens natur installeret for at etablere Batteri-backup ved strømudfald, udjævning af "klumper istrømmen" og sikring af server-nedlukningsprocedurer etc. Imidlertid kan der teknisk set også ske fejl på selve UPS-systemet. Almindelige standard UPS-systemer vil i tilfælde af fejl/nedbrud trække det beskyttede udstyr med ned, med mindre UPS-systemet er udstyret med Intern Statisk Bypass funktion. Denne er en funktion der automatisk omkobler til bystrøm i tilfælde af fejl- eller alvorlige uregelmæssigheder på UPS-systemet. Kendsgerningen er desværre at størstedelen af standard UPS-systemer i markedet er uden denne form for intern redundans (alle POWERWARE Serie-9 UPS-systemer har Intern Statisk Bypass funktion indbygget).

Eaton UPS Communications accessories

Compatibility with UPS models

Version 1.2, 2013

	Product description	Reference	Eaton EX	Eaton 5P	Eaton 5PX	Eaton 5SC (Rack or RT)	Eaton 5130	Eaton 9PX	Eaton 9SX	Eaton 9E	Eaton 9130	BladeUPS	Eaton 9155	Eaton 9390	PowerXpert 9395/9395P	Eaton 93PS	Eaton 93PM	Eaton 9PHD	Eaton 93E
	Network card MS	Network-MS P/N: 744-00255-00P	x	x	x	x	x	x	x	x	x					x	x	x	x
	Network and MODBUS card MS	MODBUS-MS P/N: 744-98065-00P	x	x	x	x	x	x	x	x	x					x	x	x	x
	ConnectUPS-X Web/SNMP card	116750221-001										x	x	x	x				
	PowerXpert UPS X-Slot card (PXGX UPS)	103007974-5591										x	x	x	x				
	PowerXpert UPS MiniSlot card (PXGMS UPS)	PXGMSUPS P/N: P-116000035														x	x	x	
	ConnectUPS-E Web/SNMP card	116750223-001									(x)	(x)	(x)	(x)	(x)				
	Environmental Monitoring Probe (EMP) Environment Sensor for web cards [one of the cards above required]	EMP001 P/N: 744-A1576	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Relay card - MS	Relay-MS P/N: 744-98067-00P	x	x	x	x	x	x	x	x						x	x		x
	Industrial relay card - MS (rev 4)	INDRELAY-MS P/N: P-116000059	x	x	x	x	x	x	x	x						x	x	x	x
	BD Slot Relay card	1014018									x								
	X-Slot Relay Card	1018460										x	x	x	x				
	X-Slot ModBus RTU Card	103005425-5591										x	x	x	x				

Description

Network card MS (Network-MS)

Provides Web interface and SNMP communication over Ethernet
- Installation in Eaton Mini-Slot Enhancement Bay (also BD Slot)
- 10/100 Mbit Ethernet
- IP v4 & v6, SNMP v1 & v3, http & https
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Configuration via RS232, DHCP, Telnet, CLI
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Card; Configuration Cable; Manual

Network and MODBUS card MS (MODBUS-MS)

Provides Web interface and SNMP communication over Ethernet and ModBus through RS 485
- Installation in Eaton Mini-Slot Enhancement Bay (also BD Slot)
- 10/100 Mbit Ethernet, MODBUS/JBUS (RTU, RS232 & RS485)
- IP v4 & v6, SNMP v1 & v3, http & https
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Configuration via RS232, DHCP, Telnet, CLI
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Card; Configuration Cable; Manual
- Limited support for 93E

ConnectUPS-X Web/SNMP card (116750221-001)

Provides Web interface and SNMP communication over Ethernet
- Installation in Eaton X-Slot Enhancement Bay
- 10/100 Mbit Ethernet (4-Port-Hub)
- IP v4, SNMP v1, http & https
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Configuration through RS232, DHCP, Telnet
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Card; Configuration Cable; Network cable; Manual

PowerXpert UPS X-Slot card (PXGX UPS) (103007974-5591)

Provides Web interface, ModBus TCP, BACnet IP and SNMP communication over Ethernet
- Installation in Eaton X-Slot Enhancement Bay
- 10/100 Mbit Ethernet (2 port hub for daisy chaining)
- IP v4 & v6, SNMP v1 & v3, http & https
- MODBUS TCP
- BACnet IP (from fw 2.3.6)
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Configuration through USB, DHCP
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Card; Configuration Cable; Network cable; Manual

PowerXpert UPS MiniSlot card (PXGMSUPS)

Provides Web interface, ModBus TCP, BACnetIP and SNMP communication over Ethernet
- Installation in Eaton 93PM MiniSlot Enhancement Bay
- 10/100 Mbit Ethernet D85
- IP v4 & v6, SNMP v1 & v3, http & https
- MODBUS TCP, BACnet IP, MODBUS 2-wire RS-485
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Configuration through USB, DHCP
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Card; Configuration Cable; Network cable; Manual

93PM, 93PS and 9PHD support only!

ConnectUPS-E Web/SNMP adapter (116750223-001)

Provides Web interface and SNMP communication over Ethernet
- External
- 10/100 Mbit Ethernet
- IP v4, SNMP v1, http & https
- Alarms through Email (SMTP)
- Automatic Time Synchronisation (NTP)
- Konfiguration via RS232, DHCP, Telnet
- Supports optional EMP (Temperature, Humidity, 2 x Digital inputs)
- Can be monitored with Eaton Intelligent Power Software
- Package contents: Adapter; Power supply; Configuration Cable; Communication cable; Manual

Environmental Monitoring Probe [EMP] (EMP001)

Accessory to Web cards and select ePDUs, adds monitoring of temperature, humidity and two digital inputs.
- External device
- Connects to Eaton Web cards and select ePDUs through RJ45 Cat 5 patch cable (1,5 m provided, 20 m max)
- Alarm limits for temperature and humidity can be set in Web cards
- Two potential free digital inputs
- Used as the temperature probe in temperature compensated charging
- Facilitates graceful shutdown of servers in case of unacceptable environmental conditions or contact closure change
- Can be monitored with Eaton Intelligent Power Software through Web cards or ePDUs
- Package contents: EMP; RJ45 Cable(1,5m); Mounting accessories, Manual

Relay card MS (Relay-MS)

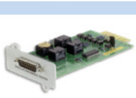
Provides communication through voltage free relays or RS-232.
- Installation in Eaton Mini-Slot Enhancement Bay
- 1 x 9-pin Dsub connector
- 1 x RS232 or 5 x Relay output / 1 x Input
- Package contents: Card; Manual
- Works in 3 phase Minislot units as well, but recommendation is to use the INDRELAY-MS

Industrial relay card MS (INDRELAY-MS)

Provides communication through voltage free relays.
- Installation in Eaton Mini-Slot Enhancement Bay
- Terminal connectors, 250 VAC/5A rating
- 5 x Relay output / 1 x Input
- Package contents: Card; Manual

Compatible with all MiniSlot UPS since rev 4!

BD-Slot Relay Card (1014018)



Provides communication through voltage free contacts.
- Installation in Eaton BD-Slot Enhancement Bay (Eaton 9130)
- 1 x 15-pin Dsub Connector
- 4 Switching Relays (both NO and NC) / 1 x Digital Input
- 12VDC unregulated voltage supply
- Package contents: Card; Manual

X-Slot Relay Card (1018460)

Provides communication through voltage free contacts.
- Installation in Eaton X-Slot Enhancement Bay
- 1 x 15-pin Dsub Connector/Terminal blocks
- 4 Switching Relays (both NO and NC) / 1 x Digital Input
- 12VDC unregulated voltage supply
- Package contents: Card; Manual

X-Slot MODBUS Card (103005425-5591)

Provides MODBUS RTU communication.
- Installation in Eaton X-Slot Enhancement Bay
- MODBUS/JBUS (RTU, RS232 & RS485)
- 3 x 9-pin Dsub connectors; 5 wire terminal block
- Configuration through RS232 and DIP switches
- Package contents: Card; Configuration Cable; Manual