



ACCESSORIES

Accessories

With the EAST Power accessories you can fully enable the power protection and power distribution products, increasing the flexibility and manageability of your organization.

ACCCE

Accessories

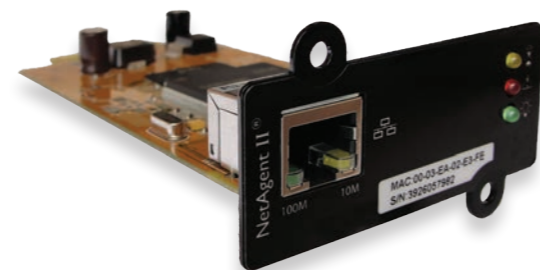


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Today's infrastructures rely heavily on the use of power

Introduction

Your UPS is one of the most important elements of your power infrastructure. As part of our dedicated approach, EAST provides different services with which to ensure the maximum performance of your hardware and software, whether in the form of training, electronic or telephone support 24/7, or full on-site assistance.

Service

Start Up Service

By letting an EAST certified engineer carry out your installation, you are certain to save both time and money. Using our knowledge and experience, we will install all of your EAST products, ensuring the safety and full life thereof. The start up service includes the on site installation and commissioning of your UPS systems, batteries and software.

Going Live Service

This is an extra feature which includes having one of our EAST certified engineers on site at the time when your configuration goes live. This will increase your confidence about this process and provides you with a helping hand in the event that something needs to be explained or adjusted on the spot.

Preventive Maintenance

Once your configuration is live and active, you want make sure that its performance is as efficient as possible. Accordingly, we offer a preventive maintenance service to ensure the life of the batteries and UPS system. An EAST certified engineer will visit you on site to check all of your EAST products.



Extended Support

If the standard support we offer does not meet your needs, you can always extend this by adding one of our extra service support packages.

These come in two different sizes:

- 9x5: five days a week, nine hours a day
- 24x7: seven days a week, 24 hours a day

Email and Telephone Support

During the support hours available to you, our services include full assistance via a customer help-line and an email service, the next day on site repair or exchange of your EAST equipment, and a response time of two hours.

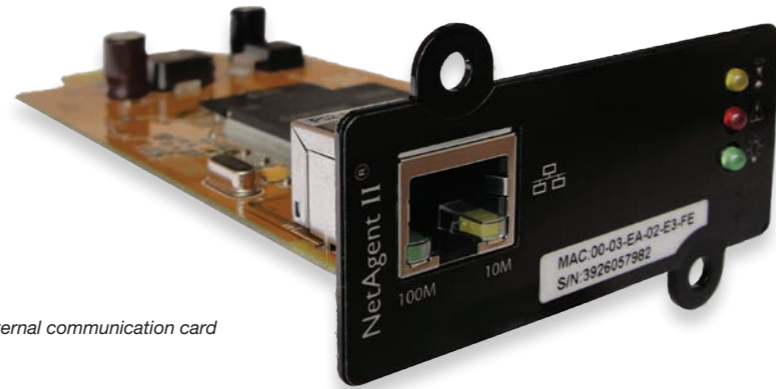
Education and Training

EAST offers technical and/or sales training to companies, public organizations and other EAST customers, with the aim of enabling our clients to maintain and optimize their UPS management skills. Different methods of training are available, ranging from web-based courses to instructor-led on site tuition.

EA-SNMP

The EA-SNMP card enables users to conveniently monitor and remotely control their UPS systems as well as obtain current status updates. In order to maximize battery life and avoid an abnormal power disconnection of the system, the card also provides a shutdown utility with which the user can set the various circumstances in which the system should be closed down.

After installing the EA-SNMP card, and to configure the IP address, the user is only required to install the software from the EA-SNMP CD into a Windows environment. All other configurations can be achieved in a standard web browser.



The EA-SNMP internal communication card

Management

Web-interface

The remote web-interface enables administrators to control the UPS system from anywhere in the world via the internet, providing advanced features such as the ability to reboot a system, execute a deep battery test, or organize a UPS self-test. Operating costs will be significantly reduced because of the off-site control of the UPS systems. What is more, detailed information about input, output, and battery status can be viewed remotely or saved as a CSV file for analysis.

SNMPview

An SNMPview enables users to simultaneously monitor and control multiple UPS systems connected to a network. During events, the SNMPView can be programmed to send an email, SMS, or message to a pager to let the designated network manager know what is happening. An SNMPView provides a detailed overview of all of the UPS systems connected to a network. This gives users instant access to details of each individual UPS, as well as the ability to control each separate UPS system by performing self-tests, sending history files, or turning a system on/off.

Telnet

Telnet is a protocol which is commonly used in network environments. It provides users with the ability to communicate between the UPS and the EA-SNMP card, enabling the UPS system to be controlled through the Telnet interface.

NMS

The EA-SNMP card supports a variety of network management systems, which makes it possible to integrate it with the systems already installed within an organization.

Some examples of supported network management systems are:

- HP Openview
- SUN SunNet Manager
- IBM Trivoli
- Novell NMS
- Megatec SNMPview
- Other SNMP compatible NMSs

Shutdown Utility

ClientMate is a utility which provides a connection to the EA-SNMP card. When detecting an AC fail, low battery, or a scheduled shutdown signal from the EA-SNMP, the ClientMate will save files and close down the system.

Building Management System (BMS)

Today's buildings are increasingly being fitted with an integrated Building Management System with which to fully control all aspects of a property, thus reducing overall power consumption and management maintenance costs. Many aspects of buildings can be monitored a.o:

- Cooling/heating control, ventilation control, pumps, etc.
- Lighting control of common areas
- Consumption measurements of water, electricity and cooling (heating) energy
- Access control system for common areas
- Intruder alarm system for common areas
- Video monitoring system for common areas
- Fire alarm system

The UPS is an important part of this integration process, which is why the EA-SNMP card can be set to communicate through the SNMP or MODBUS on TCP/IP. These are the common protocols used within Building Management Systems, but when different approaches are required, users have the option to utilize our protocol converter. This is capable of converting the SNMP to BACnet over IP, or any other protocol in use, and means that the EA-SNMP card is multi-deployable in many different configurations.



The EA-SNMP-EXT external communication card

One and Three Phase

All EAST UPS systems equipped with an SNMP slot give users the option to install our EA-SNMP card. Available in the line interactive 300PRO series, the online EA900(R) single phase series, and the three phase series such as the EA99 high frequency and the low frequency EA803, the EA-SNMP card is able to easily manage a wide range of UPS systems via a unified interface.

Licence Free

The EA-SNMP card includes a unique and customer friendly feature; all client licences and management software are licence free. This means that there will be no restriction on a user's ability to deploy the client software or make copies of the SNMP view.

OS Support

The EA-SNMP card client software supports all of the major operating systems currently available. Integration with each of these ensures that the EA-SNMP card is widely deployable for a variety of communication needs.

Support is available for:

- Windows XP
- Windows Vista
- Windows 7
- Linux
- FreeBSD
- SCO UNIX
- Novel UnixWare
- AIX
- SUN OS
- SUN Solaris
- HP-UX
- SGI

EAST Power N.V. Technical Specification EA-SNMP	
Model	EA-SNMP-INT
GENERAL	
CPU	ARM 50MHz 32Bit
System Clock	50MHz
Flash Memory	2MB
SDRAM	8MB
LED	5
Watch Dog	Yes
Modem Port	Yes
LCD Display	No
LAN Interface	10M/100M UTP
Ethernet Troughput	1620KB per second
Ethernet Latency	0.759 milliseconds

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EAST Power N.V. Technical Specification EA-SNMP		
Model	EA-SNMP-INT	
POWER		
DC Input Voltage	5.3V ~ 40V	
DC Input Current	2W Maximum	
PIN ASSIGNMENT		
PIN:	FUNCTION:	INPUT/OUTPUT:
P1	GND	GND
P2	Power In	Input
P3	RS232_TXD	Output
P4	RS232_TXD	Input
P5-P7	No function	
P8	SNMPSIG	
P9	GND	GND
P10	SNMPSIG	
P11	RS232_DCD	Input
P12	RS232_DTR	Output
P13	No function	
P14	RS232_RTS	Output
P15	RS232_CTS	Input
P16-P26	No function	
SIGNAL SPECIFICATION RECEIVER INPUTS		
PARAMETERS:	CONDITIONS:	MINIMUM:
Input Voltage Range		-25V
Input Treshold Low	TA = +25_C	+0.6V
Input Treshold High	TA = +25_C	
Input Hysteresis		
Input Resistance	TA = +25_C	3 k ohm
SIGNAL SPECIFICATIONS TRANSMITTER OUTPUT		
PARAMETERS:	CONDITIONS:	MINIMUM:
Output Voltage Swing	AI transmitter outputs loaded with 3k ohm to ground	± 5.0V
Output Resistance	TA = +25_C	300
Output Short Circuit Current		
ENVIRONMENT SPECIFICATIONS		
PARAMETERS:	CONDITIONS:	
Operating Temperature		
Storage Temperature		
Operating Humidity	Non-Condensing	
Storage Humidity	Non-Condensing	
EMI		
FCC Class B, CE		

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EA-SNMP II

Like the EA-SNMP card, the EA-SNMP II is a complete management and monitoring tool. It enables users to manage all elements of the UPS, as well as monitor surroundings in real-time via environmental sensors.

All aspects of the EA-SNMP-II can be monitored from anywhere in the world through the user friendly web and Telnet interfaces. It can also be intergrated into your NMS or BMS systems through the industry standard SNMP MIB or Modbus protocol, making it a flexible and total solution for both central and decentralized locations.



Top en front view of the EA-SNMP II

Environmental Sensors

Temperature, water level, humidity and gas sensors are connected directly to the SNMP-II, while other sensors are linked via a wireless connection. This makes the SNMP-II a flexible solution which does not need cables and is not bound by structural limitations. All of the sensors are monitored in real time and can be set up with user defined thresholds, reducing the response time to an event and improving both system up time and efficiency. Included in the SNMP-II are the following:

- Temperature sensor
- Humidity sensor
- Smoke detector
- Door sensor
- Gas sensor
- Water sensor



Management

Web-interface

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Door sensor

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- IBM Trivoli
- Novell NMS
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Shutdown Utility

ClientMate is an utility which provides a connection to the EA-SNMP card. When detecting an AC fail, low battery, or a scheduled shutdown signal from the EA-SNMP, the ClientMate will save files and close down the system.

EA-GPRS

In locations where there is no network/internet access or a normal modem, the optional EA-GPRS is a cost effective method with which to monitor the UPS via the GPRS network. The EA-GPRS card provides users with the ability to manage and monitor their system and program it to send an SMS in the case of specific events set by the user. It is:

- Convenient, like working on a normal network
- Easy to set up and monitor
- Increases security



EA-GPRS Modem card

Building Management System (BMS)

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- Lighting control of common areas
- Consumption measurements of water, electricity and cooling (heating) energy
- Access control system for common areas
- Intruder alarm system for common areas
- Video monitoring system for common areas
- Fire alarm system

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One and Three Phase

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and management software are licence free. This means that there will be no restriction on a user's ability to deploy the client software or make copies of the SNMP view.

OS Support

The EA-SNMP card client software supports all of the major operating systems currently available. Integration with each of these ensures that the EA-SNMP card is widely deployable for a variety of communication needs. Support is available for:

- Windows XP
- Windows Vista
- Windows 7
- Linux
- FreeBSD
- SCO UNIX
- Novel UnixWare
- AIX
- SUN OS
- SUN Solaris
- HP-UX
- SGI

EAST Power N.V. Technical Specification EA-SNMP	
Model	EA-SNMP-EXT
GENERAL	
CPU	ARM 50MHz 32Bit
System Clock	50MHz
Flash Memory	2MB
SDRAM	8MB
LED	5
Watch Dog	Yes
Modem Port	Yes
LCD Display	Yes
LAN Interface	10M/100M UTP
Ethernet Troughput	1620KB per second
Ethernet Latency	0.759 milliseconds

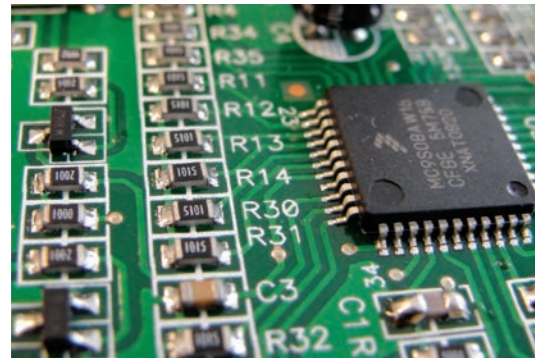
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EAST Power N.V. Technical Specification EA-SNMP		
Model	EA-SNMP-EXT	
POWER		
DC Input Voltage	5.3V ~ 40V	
DC Input Current	2W Maximum	
PIN ASSIGNMENT		
PIN:	DESCRIPTION:	
P1	Ground PIN	
P2	DC power input	
P3	+5.5V and -5.5V Voltage level for RS232	
P4	-3V to -15V for logic '1', +3V to +15V for logic '0'	
P5-P7		
P8	Netagent card plug in detect, connect to PIN 10	
P9	Ground PIN	
P10	Netagent card plug in detect, connect to PIN 8	
P11	+/-3V to +/-15V for RS232	
P12	+5.5V and -5.5V for RS232	
P13		
P14	+5.5V and -5.5V for RS232	
P15	+/-3V to +/-15V for RS232	
P16-P26		
SIGNAL SPECIFICATION RECEIVER INPUTS		
PARAMETERS:	TYPICAL:	MAXIMUM:
Input Voltage Range		+25V
Input Treshold Low	+1.2V	
Input Treshold High	+1.5V	+2.4V
Input Hysteresis	0.3V	
Input Resistance	5 k ohm	7 k ohm
SIGNAL SPECIFICATIONS TRANSMITTER OUTPUT		
PARAMETERS:	TYPICAL:	MAXIMUM:
Output Voltage Swing	± 5.4V	
Output Resistance	10M	
Output Short Circuit Current	± 35 mA	± 60 mA
ENVIRONMENT SPECIFICATIONS		
PARAMETERS:	MINIMUM:	MAXIMUM:
Operating Temperature	0 °C	60 °C
Storage Temperature	-40 °C	125 °C
Operating Humidity	10% Relative Humidity	90% Relative Humidity
Storage Humidity	5% Relative Humidity	95% Relative Humidity
EMI		
FCC Class B, CE		

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EA-Relay

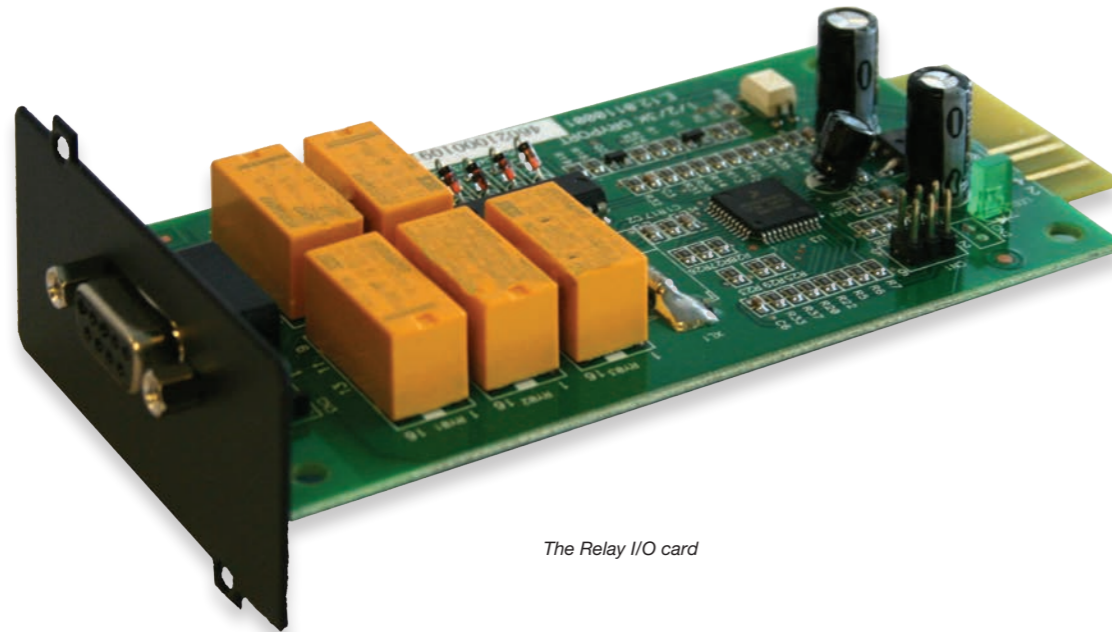
The EA-Relay Interface Card provides a free, true relay interface for relay connected computers, and industrial, telecom, and security applications that are used in circumstances where RS232 serial or network TCP/IP communications are not supported or are inappropriate.



Detail of the Relay I/O card

The EA-Relay can be installed in the communication slot at the rear of the UPS, providing notifications such as:

- On Battery
- On Bypass
- Low Battery
- Summary Alarm
- UPS Fault
- On UPS



The Relay I/O card

EAST Power N.V. technical specifications EA-RELAY		
PIN DEFINITION		
Pin Assignment	Function Description	I/O
Pin1	UPS Failure	O/P
Pin2	UPS Audible Alarm	O/P
Pin3	GND (Common for Pin4)	I/P
Pin4	Remote Shutdown	I/P
Pin5	Common for Relays	I/P
Pin6	Bypass Active	O/P
Pin7	Battery Low	O/P
Pin8	UPS ON	O/P
Pin9	Utility Failure	O/P
FUNCTION DESCRIPTION		
Phenomenon	Reason	
Pin1 short to Pin5	UPS internal failure	
Pin2 short to Pin5	UPS failure, Utility failure, Battery Low, Battery Active	
Pin6 short to Pin5	Bypass Active	
Pin7 short to Pin5	Battery voltage is Low	
Pin8 short to Pin5	UPS working in Inverter (AC) mode	
Pin9 short to Pin5	Utility failure	
Pin6 open to Pin5	Remote Shutdown UPS ON	
Pin8 open to Pin5	Bypass Active	

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Protocol Converter

The protocol converter is designed to be used by customers who need to quickly and easily enable their UPS or other devices to interface with other protocols. The extensive driver library gives clients the confidence that their products will meet the requirements of foreign networks for interfacing purposes.



The Protocol Converter

The protocol converter provides the greatest flexibility and versatility available today. It supports virtual nodes, which allow multiple OEM controllers to connect to a single protocol converter and yet be seen as separate devices in the various field networks.

The protocol converter includes all of the hardware and software required to enable a customer's products to interface with a variety of networks. It has two serial and one ethernet port and comes with the necessary protocol drivers. Multiple drivers can be installed on a single protocol converter.

Supported Host Side Protocols

- RS-232 or RS-485 connection to OEMs' devices:
- Modbus RTU
 - Allen Bradley DF1
 - BACnet MSTP
 - Metasys N2
 - Any custom OEM's serial driver

- Ethernet (10/100Base-T) to the OEMs' devices:
- Allen Bradley EtherNet/IP
 - BACnet IP
 - BACnet Ethernet
 - Modbus TCP/IP
 - Allen Bradley DF1
 - BACnet MSTP
 - Modbus RTU/Modbus ASCII
 - Metasys N2
 - DNP 3.0
 - TL1
 - Telnet

- Ethernet (10/100 Base-T)
- Allen Bradley CSP
 - Allen Bradley EtherNet/IP
 - BACnet Ethernet
 - BACnet IP
 - GE-EGD
 - GE-SRTP
 - Modbus TCP
- Supports virtual nodes, allowing multiple OEM controllers to connect to a single protocol converter and yet be seen as separate controllers in the various field networks
 - TRUE protocol translation and not protocol packet encapsulation
 - Interfaces to over 85 building and industrial automation protocols
 - Bridges between Allen Bradley DF1, or Modbus RTU, or ASCII to BACnet MSTP/IP, or Allen Bradley EtherNet/IP, or Allen Bradley CSP
 - Translates between Ethernet to Ethernet Protocols i.e. SNMP > BACNET, Modbus TCP > Allen Bradley EtherNet/IP devices and vice versa
 - Two RS-232/422/485 software selectable

EAST Power N.V. Technical Specification EA-PROTA	
MODEL	EA-PROTA
COMMUNICATION INTERFACE	
Serial	Two ports that can be configured as either RS-232 or software RS-485 Independent port configuration of baud rates, data bits, stop bits and parity
Connectors	RS-232/422/485: DB-9 connector, up to 115.2 Kbps
ETHERNET INTERFACE	
LAN Interface	10/100BaseT Ethernet (auto-sensing)
Connectors	LAN: RJ-45 connector
OPERATION	
Processor Memory	32 bit ColdFire CPU features 4 MB flash, 16 MB SDRAM, 66 MHz
Power Requirements	5 VDC to 30 VDC
Opt.Power Supply	110V-230V Switchable power supply that will plug into the DC screw block
LEDs	Diagnostics
Configuration	Software configurable
Temperature	-40°F to 187°F (-40°C to 85°C)
Humidity	5-90% RH, non-condensing
Size	4.55 x 4.50 x 1.35 inches (L x W x H) (11.56 x 11.68 x 3.43 cm)
Weight	300 gram

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- serial ports enable serial to serial protocol translation for bridging legacy devices to industrial automation or building automation networks
- Can easily support OEMs' custom host serial or Ethernet protocols
 - Multi-client and multi-server support ensures interoperability between any industrial and/or building automation protocols
 - Flash upgradeable
 - RoHS compliant
 - Din rail mount optional

Communication Interface

- Serial Interface; two ports which can be configured as either RS-232 or software selectable RS-485
 - Independent port configuration of baud rates, data bits, stop bits and parity
 - Connectors RS-232/422/485: DB-9 connector, up to 115.2 Kbps
- Ethernet Interface
- LAN Interface 10/100BaseT Ethernet (autosensing)
 - Connectors LAN: RJ-45 connector

- Operating
- Processor Memory: 32 bit ColdFire CPU features 4 MB flash, 16 MB SDRAM, 66 MHz
 - Power Requirements: +/-5 VDC to 30 VDC
 - Opt.Power Supply: 110V-230V switchable power supply which will plug into the +/- DC screw block connector
- LED Diagnostics
- Configuration: software configurable
- Environmental
- Operating Temp: -40°F to 187°F (-40°C to 85°C)
 - Relative Humidity: 5-90% RH, non-condensing

- Enclosure
- Dimensions: 4.55 x 4.50 x 1.35 inches (L x W x H) (11.56 x 11.68 x 3.43 cm)
 - DIN rail mount: optional

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