Axxess Identification

i-PDU

intelligent power distribution unit

Security, environmental monitoring & remote site monitoring

Safeguard equipment and systems 24/7/365

Product Features

- individually fused outlets
- smart startup based on current sensing
- central management software
- 13/16 & 32 amp plugs
- Plug and Play connectivity
- configurable sequential start-up
- mains filtered
- monitored on / off switch
- 2 x 20 character display
- individual socket status: on / off / fuse failure and fault
- KWH display / voltage / current / firmware and software version
- alarm settings and monitoring
- socket change status on / off
- alarm maximum voltage / current
- pre-alarm maximum voltage / current
- low minimum voltage / current alarm
- sudden increase voltage / current alarm
- daily, weekly, monthly reports
- selectable start and end date
- average and peak KWH usage
- group i-PDU's by circuit and / or client

The intelligent power distribution unit (i-PDU) has been specifically developed to monitor, measure, manage, collate, analyse and report on information, through the port of an i-Box environmental monitoring and access control unit.

The i-PDU has been designed to provide real time, bi-directional communications with each connected i-PDU over a standard Ethernet Network, providing not only monitoring and recording of power consumption values, but actively controlling the operation of the i-PDU outlets.

Transaction data is buffered at the i-Box and synchronized automatically with the central management software. Each i-PDU stores its start-up configuration data, so even during a full power-down the i-PDU will start-up as configured. The i-PDU contains a precise measuring device that samples for KWH readings 4,000 times per second, readings are reported at scheduled time intervals to the i-Box.

Instant Status Monitoring

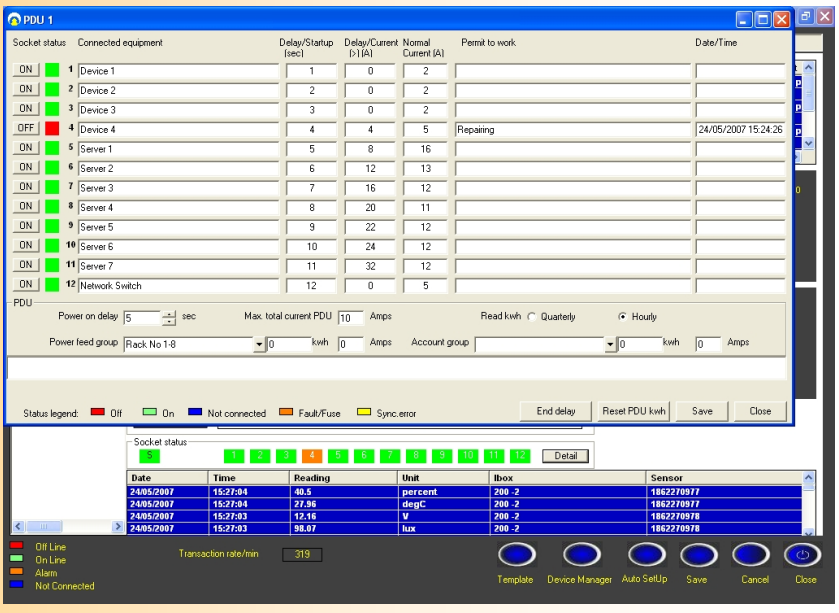
The status of each socket outlet is displayed on the left hand side of the main i-PDU screen, with each status showing a unique colour. Green indicates that the socket is switched on and red indicates that the socket is switched off. Fuse failures in any of the sockets, will be shown in orange and the appropriate transaction recorded in the main screen. Each outlet can be clearly identified by including a brief description of the equipment connected to each socket.

Delay Start-up — indicates the number of seconds before a socket is activated when the i-PDU is switched on. If the input value is set to zero, the socket will not be switched on. The input range can be from 0 to 255 seconds.

Delay/Current — indicates the upper limit of the current in the unit before a particular outlet is switched on. For example if the input value for a particular socket is 5, it will not be switched on until the current in the unit has dropped down to 5 amps or less.

Smart Start — it is possible to configure the outlets / sockets in the order that you wish them to start with perhaps less delay between ports utilising the current sensing feature, as this will automatically delay the next socket until the current has been sensed to be below the configured threshold.

Current — status shows the amount of current used by the i-PDU. A value can be input in the Normal field to determine whether the current consumption is at a normal / acceptable level.



The main i-PDU sensor screen provides a clear overview of the current status of each i-PDU, a real-time graph is provided for instant visual analysis of the most recent transactions.

Transaction logging is user-definable:

Reporting Frequency— how often the live reading on the sensor is transmitted to the PC.

Read Frequency—how often the i-Box unit interrogates the sensor for a reading

Store Frequency—how often the readings are stored on the local database. Note that when the i-Box is connected to the PC software readings are also stored at the PC at intervals as set on the reporting frequency. Each i-Box can store locally a maximum of 5,000 readings. This can be expanded to 16,000 with additional memory. Storage at the PC is only limited by the size of the hard disk.

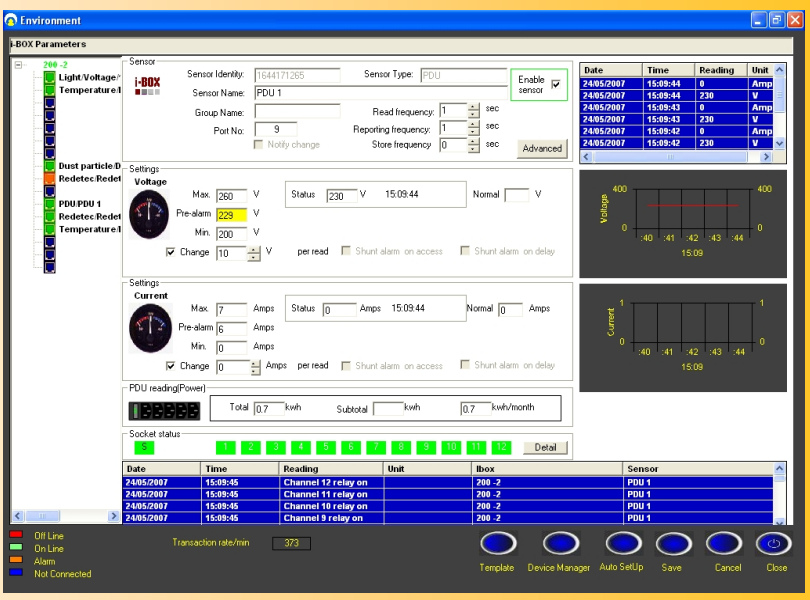
Maximum / Pre-Alarm / Minimum Change—can be defined for both voltage and current. Once the reading exceeds these limits it will trigger an alarm and the appropriate transaction will appear on the main screen, providing the sensors type, alarm description, i-Box name and sensor ID. These alarms can be configured to transmit SNMP traps or email / SMS via a SMTP server. Alarms can also be sent directly from the i-Box to ARC's (Alarm Receiving Centres), this provides a guaranteed response and follow-up out of hours.

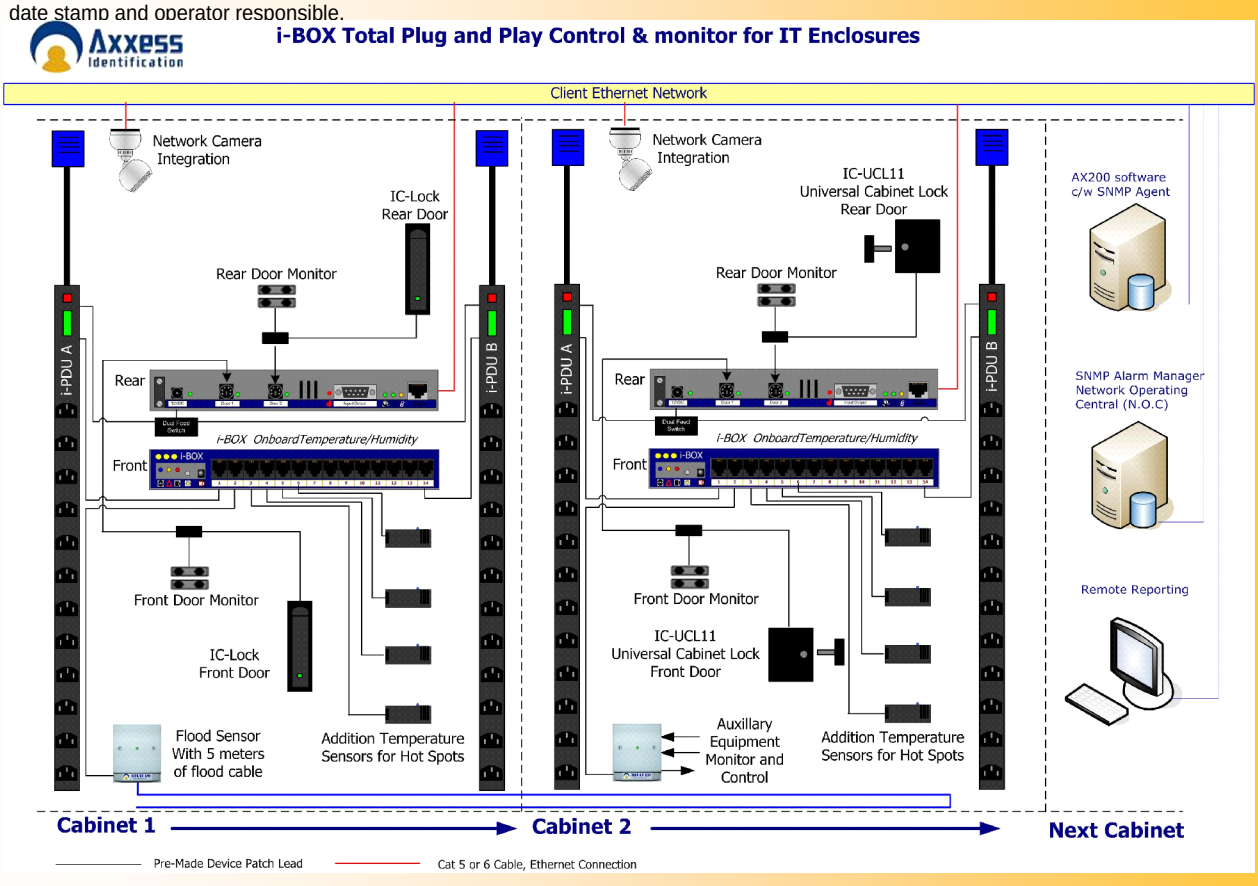
Permit to Work & Date/Time: the last two columns display the last explanation of why a socket was switched on or off. The user is forced to complete a pop up window with the reason why the socket status has been manually changed; this transaction is stored on the server software with time/ date stamp and operator responsible.

Overall delay— the delay that mains has to be continuously present before the first socket delay timer starts. By setting individual i-PDU's with a sequenced start-up will avoid surges of power on equipment connected to i-PDU's fed from the same power circuit. This avoids multiple attempts for mains to return and the surges this can cause.

Threshold Current is the maximum current you can obtain from the i-PDU. Pressing the end delay button will terminate any delay time and all the sockets in the unit will be switched on.

Reset Power button will bring the value of total power back to zero.





Product Specifications

Colour:	Black RAL9500
Connectivity	TCP/IP (through I-Box)
Rated Voltage	230 VAC
Rated Current	Up to 16A
Operating Temperature	0ºC to +65 ºC
Storage Temperature	-25ºC to +65 ºC
Measuring Accuracy	1%
Measurement Method	4,000 samples of voltage and current per second
Local Display	Backlit LCD of current, voltage, KWhr, firmware & hardware versions, socket status & diagnostics
Rated Supply Current	10A per socket—total maximum 16A
Software	AX Standard, Pro, & Enterprise

Order Guide / Part Numbers

Part Number	IEC C13 60320 Outlet	IEC C19 60320 Outlet	13 Amp Socket	16 Amp Socket	32 Amp Socket
I-PDU-13 10+2 Way	10	2	✓		
I-PDU-16 10+2 Way	10	2		✓	
I-PDU-32 10+2 Way	10	2			✓
IC-PDU-2-13-BK 2 Way	2		✓		
IC-PDU-2-16-BK 2 Way	2			✓	
IC-PDU-2-32-BK 2 Way	2				✓
IC-PDU-12-13-BK-VC1 12 Way	12		✓		
IC-PDU-12-16-BK-VC1 12 Way	12			✓	
IC-PDU-12-32-BK-VC1 12 Way	12				✓

Axxess Identification

27-28 Shrivenham Hundred Business Park, Watchfield, Swindon,
Wiltshire SN6 8TZ United Kingdom
Tel: +44 (0)1793 784002
Fax: +44 (0)1793 784005
Email: info@axxessid.com
Website: www.axxessid.com

Distributor:

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