

KWX-ATS16A2C19-H2 ATS2



"The most innovative automatic transfer switch on the market"

Key Features

- Individual outlet monitoring
- Adjustable sequential powering (on)
- 8 millisecond Switch over
- Total current monitoring
- Total voltage input & output monitoring
- Total kWh used
- Power factor recognition
- Up to 55°C Hot aisle operating capacity
- SMS, SNMP & Email
- Built in environmental monitoring as standard
 - o Temperature & humidity alarm sensor
 - o Water logging alarm sensor
 - o Rack door tamper sensor
 - o Infrared sensor
 - o Smoke detector
- Automated alarm notifications
- Up to 8 plug and play sensors
- Lockable IEC C13 sockets as standard
- Blade server ready
- Intelligent outlet type and recognition
- 24v & 48v DC, Single phase 120v & 240v & 3 phase 400v
- Effortless user friendly PDU management interface
- Control up to 3 KWX-ATS slaves from a master KWX-ATS
- 2x IP44 16A Commando inputs
- 2x IEC C19 outputs

KWX-ATS16A2C19-H2 - 1U 16Amp (A & B Input), 2 port (2 x C19).
19" rack mountable intelligent automatic transfer switch – Provides, Unit Monitoring and Individual Outlet Level Monitoring.

PDU eXperts KWX Automatic Transfer Switches (ATS) seamlessly switch loads between primary and backup power sources, this combined with real time power monitoring and built in environmental monitoring makes it one of the most advanced transfer switches on the market.



Dimensions: 440mm x 45mm x 330mm (W x D x L)

Mounting length: 483mm



KWX-ATS series

Intelligent Automatic Transfer Switches

In the event where the primary power source becomes unavailable, the KWX ATS will flawlessly source power from the secondary source without interrupting sensitive equipment, the switching occurs in just 8ms safely between the two input sources regardless of their phase.



8ms



PDU eXperts intelligent KWX-ATS management software enables the administrator to give designated users predetermined control over whole ATS units or even single outlets over a range of ATS units. Users have the ability to monitor and control directly through the ATS units network module on site, or remotely using our embedded multithreading inner core "Real time operating systems" (RTOS) software.

The management software is accessible within the data centres secure hardwired network, supporting various TCIP/IP protocols, including HTTP, HTTPS, SSL, SNMP versions 1,2 & 3, TELNET, SSH, SMTP and NTP from any network PC or laptop.

KWX Automatic Transfer Switches are available in a range 19" horizontal rack mounted options, with a variety of outlets including slide lock IEC C13 as standard, IEC C19, UK BS1363, NEMA (5-15), SCHUKO (EEC 7/4). Input/load connectors options include single phase 16A / 32A and 3 Phase IP44 Commandos.

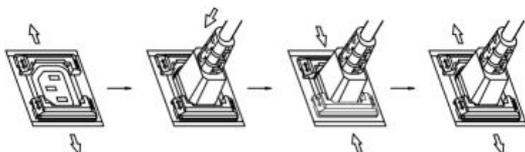
ATS1 – ATS total power monitoring – Provides real time power consumption (current / voltage), total power (kW) used, apparent power and power factor.

ATS2 – Individual port power monitoring – Provides real time ATS power consumption & the current on individual ports, total power (kW) used, apparent power and power factor.

ATS3 – ATS monitoring & individual port switching – Provides real time power consumption, total power (kW) used, apparent power and power factor. Each individual port/outlet is also switchable (ON / OFF)

ATS4 – ATS and per port power monitoring and switching – Complete power monitoring and switching (ON / OFF) of the ATS and each individual port, total power (kW) used, apparent power and power factor.

| Feature | Function | N1 | N2 | N3 | N4 | |
|-------------------------|--------------------------------------|--------------------------------------|-------------|----|----|---|
| Monitor functions | LED Display | Total & individual port current load | ✓ | ✓ | ✓ | ✓ |
| | | Overload flashing LED alarm | ✓ | ✓ | ✓ | ✓ |
| | | ATS IP address, version number | ✓ | ✓ | ✓ | ✓ |
| | Management software / Hyper terminal | Total current load | ✓ | ✓ | ✓ | ✓ |
| | | Monitors current load per port | ✗ | ✓ | ✗ | ✓ |
| | | Input voltage | ✓ | ✓ | ✓ | ✓ |
| | | Configure low/high voltage limits | ✓ | ✓ | ✓ | ✓ |
| | | Configure low/high Current limits | ✓ | ✓ | ✓ | ✓ |
| | | Sensor(s) state (optional) | ✓ | ✓ | ✓ | ✓ |
| | | Power ON/OFF individual ports | ✗ | ✗ | ✓ | ✓ |
| Control functions | PC Control | Power ON/OFF ATS | ✗ | ✗ | ✓ | ✓ |
| | | Set Primary Power source | ✓ | ✓ | ✓ | ✓ |
| | | Intelligent setup memory on restart | ✗ | ✗ | ✓ | ✓ |
| | | Access methods | RS 485 port | ✓ | ✓ | ✓ |
| Daisy chain connections | | Serial connection | ✓ | ✓ | ✓ | ✓ |
| | | Radial connection | ✓ | ✓ | ✓ | ✓ |



Slide locking IEC C13 outlets

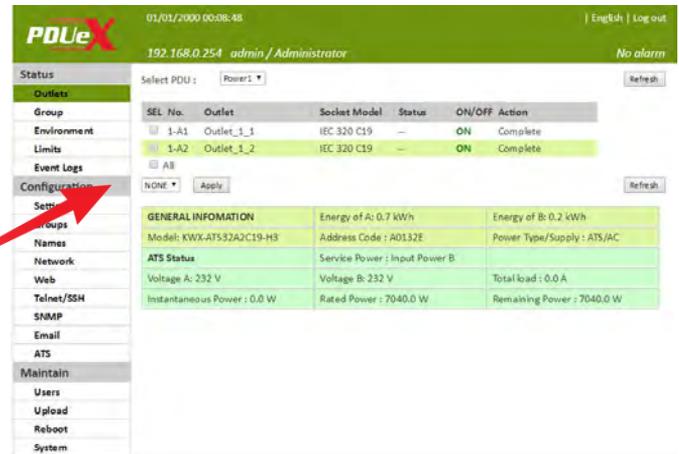
All KWX-ATS units come with lockable IEC C13 outlets as standard.

KWX-ATS Series Interface

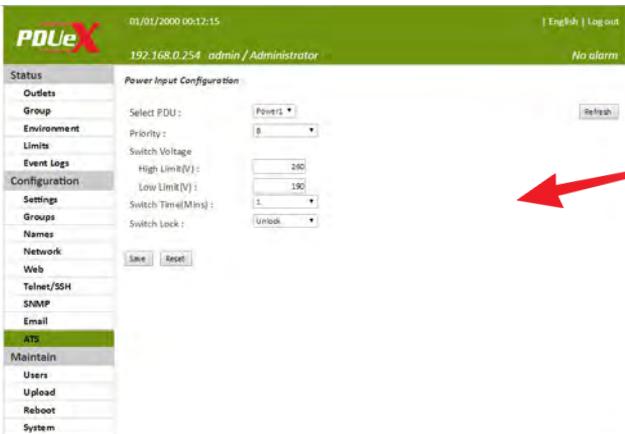
The KWX-ATS management software has an effortless interface giving easy access to the master ATS unit and any of its slaves (up to 3 KWX-ATS units). The interface allows multiple users to not only monitor the power usage, but also set input/output thresholds (depending on version), if these parameters are exceeded KWX-ATS units engage both visual and audible alarms, these alarms can also be configured to be sent via SMS or Email to designated users.

Each KWX-ATS is given a default IP address which can be changed by the administrators to meet your networks requirements and can be accessed via most popular browsers such as Internet Explorer, Google Chrome, Edge, Fire fox etc.

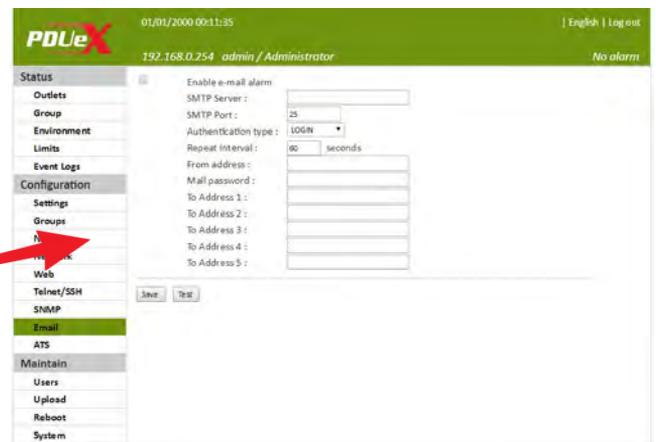
Real time Power usage & outlet monitoring



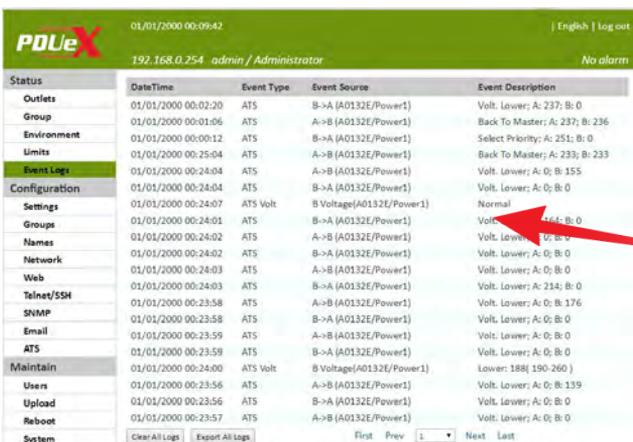
Configure power thresholds



Configure user accounts and email alarm notifications



Real time event log including alerts, user logins and reboots.



KWX-ATS Series environmental monitoring.

PDU eXperts KWX-ATS series is complete with built in environmental monitoring software, with up to 8 'plug n play' sensors (optional) to monitor the server rack or data centers direct environment conditions (temperature & humidity sensor, smoke detector or water logging sensor) or add additional security (door tamper sensor or infrared sensor).

The environmental monitoring is accessible via the management software and includes individual user permissions, threshold settings and alarm notifications. It is an ideal system for small data centers, although often used as an addition to pre-installed systems in larger data centers.



Temperature/
Humidity Sensor



Water Logging
Sensor



Infrared Sensor



Smoke Sensor



Door Sensor



Cascade up to 8 plug 'n' play
environmental sensors to
security and peace of mind



KWX-ATS Specifications

| Feature | Description | Function / Parameter | Note |
|------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Working Voltage | Normal conditions | 90V~250V AC | |
| Input/output current | Max input/output current | 10A / 16A | |
| Working frequency | Normal conditions | 47Hz~60Hz | |
| Access ports | Network | Network port WAN or LAN access | 10/100Mb adaptive networking |
| | Serial | Serial port | RS485 port |
| | Sensors | Sensor ports | RS485 port |
| Data / management access | HTTP/HTTPS | Web browser access | Internet Explorer, Google Chrome, Edge, Fire fox etc. |
| | Telnet | Simple command line | / |
| | SSH | Encryption command | SSH v2 supported |
| | SNMP | SNMP centralised monitoring | SNMP v1, v2, & v3 |
| System capability | Supported by various popular operating systems | Windows 7 /8 /8.1/10 & Linux etc. | |
| | System integration | TELNET / SSH protocol | |
| | RS485 connection | Customized protocol | |
| Software/Firmware Update / Upgrade | Software / firm ware updates | Via web site / Support technician | |
| | BIOS Firmware updates (if necessary) | Support technician | |
| Alarm setting thresholds | Total current limits (low / high) | Automatic detection & automated SMS / Email notifications | |
| | Temperature limits +/- | | |
| | Humidity limit | | |
| LED indicators / Display | Outlet led indicators | LED indicator per outlet | Optional |
| | 6 digit /7 segment display | Nixie tube Display shows: current / voltage. Product information. Alarm information | |
| Network module features | Provides ATS information | Displays ATS serial number and working voltage, current power usage and alarm information | |
| | Audio sound alerts | Sounds when ATS is powered ON/OFF | |
| Management software | User/Administrator account settings | Set access permissions for multiple users over multiple ATS \ outlets | |
| | Outlet settings | Set thresholds per port or group of ports | |
| | Alarm notifications | Configure SMS and Email notifications when thresholds are exceeded | |
| | Control / monitor multiple ATSs from master ATS | Up to 3 slave ATS can be controlled and monitored via a single master ATS | |
| | Event log | Real time event record (displays exceeded thresholds, user logins and activities) | |
| Outlet features | Sequential power ON / OFF | Adjustable sequential power on intervals are 1~250 seconds, power off is 0.5 seconds | N3/N4 only |
| | Intelligent status holding | Power ATS settings are retained after a restart | N3/N4 only |
| | Surge protection | Circuit breaker added whole ATS | Optional |

Specifications continued

| Feature | Description | Function / Parameter | Note |
|-------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------|
| Monitoring abilities | Input voltage | Scale: 1V Accuracy: $\pm 1\% + 1$ digit Meter range: 90V~350V | |
| | Total current | Scale: 0.1A Accuracy: $\pm 1\% + 1$ digit Meter range: | |
| | Total kWh usage | Scale: 0.1 kWh Accuracy: 1 grade | |
| | Environment temperature | Resolution: 1°C Accuracy: $\pm 1\% + 1$ digit Meter range: -30°C ~ 100°C | Optional |
| | Environment humidity | Scale: 1% Accuracy: $\pm 1\% + 1$ digit Meter range: 1%~99% | Optional |
| | Smoke detector | Up to 25m ² range | Optional |
| | Infrared sensor | 16m range | Optional |
| | Water logging sensor | Water logging / drop monitor | Optional |
| | Door tamper sensor | 5mm leeway | Optional |
| | Surge protection failure | Automated notification | Optional |
| Outlet / port & sensor alarms | Fuse failure | Sound alarm (buzzer) Remote alarm: Email, SMS, SNMP TRAP & management software | Optional |
| | Current threshold | | Optional |
| | Temperature threshold | | Optional |
| | Humidity threshold | | Optional |
| | Smoke detector | | Optional |
| | Door tamper sensor (open) | Remote alarm: Email, SMS, SNMP TRAP & management software | Optional |
| | Surge protection failure | | Optional |
| | Infrared sensor | | Optional |
| Hardware protection | Surge protection | Difference mode: ± 2 kV Common mode: ± 2 kV Flux: 3kA Discharge current: 5kA (max) | Optional |
| | Each port fused | Breaking capacity: 1500A Main line break protection Fuse range: 0.1A ~ 16A/32A (depending on model) | Optional |
| | Circuit breaker | Breaking capacity 6000A | Optional |
| Intelligent recognition | Outlets / Ports | Automatic outlet type & port number recognition | |
| | Environment sensors | Automatic sensor type and port recognition | |
| | Power thresholds | Auto detect when threshold are exceeded | |
| | Current and total power usage | Real time record of current and total power usage | |
| | Power factor | Real time power factor usage | |
| Sensor modules (option) | Up to 6 plug 'n' play sensor modules | Flexibility of sensor choice | Optional |
| Multiple ATS cascading | Up to 3 slave ATS can be controlled and monitored via a single master ATS | Connect via network cable (RJ485 ports) | |