# InfraPower Manager - IPM-04-1P-WMeter

Is IPM-04 management software free of charge ?
Yes.



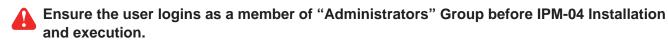
#### 2. What is InfraPower Manager?

The InfraPower Manager IPM-04 is a Windows based system to consolidate management of max. **800 PDUs** via **50 IP dongles**, using a simple web interface which monitors and controls dual feed single phase, single & 3 Phase W series PDUs.

- SNMP Capability v2 / v3 via IP Dongle
- Outlet switch On/Off and scheduling
- Outlet level kWh & amp measurement
- Temp-Humid monitoring
- Graphic user interface
- PDU & outlet reporting ( kWh / Amp / Event / Temp & Humid )

## 3. Which OS platform does IPM-04 support?

- MS Windows 10 Pro
- MS Windows 7 Professional with SP1
- MS Windows Server 2012 R2 Standard Edition
- MS Windows Server 2008 Standard Edition SP2
- MS Windows Server 2008 R2 Standard Edition SP1
- MS Windows Server 2003 R2 Standard Edition with SP2



#### 4. What are the default ports used in the IPM-04?

- UTP port: 8890 for searching IP Dongle
- TCP port : 4000 for IP Dongle communication
- TCP port: 80 for HTTP
- TCP port : 25 for email alarm service ( can be changed by user )

#### 5. Why can't I access the login page?

- If the web service is started & the port of web server is open in firewall setting

# 6. Why can't I login remotely?

- If the login name & password is correct

# 7. Which database does the IPM-04 support?

PostgreSQL

# 8. What is the PostgreSQL default password for IPM-04?

1qaz2WSX

#### 9. How can I receive alarm email and get full log report?

Ensure that IPM-04 is executed and the alarm server is configured properly and being enabled.

# 10. What is the default user name & login password of IPM-04?

Default user name "admin" / Default login password "00000000"

#### 11. What is the command password of IPM-04?

- Each IP Dongle group has its command password ( Default " 00000000" ) .
- For security, it will be requested for any PDU configuration and control.
- Only administrator can set command password.
- The passwords are disabled or enabled, same or different subject to the administrator's management.

## 12. Is it possible to increase PDU from 800 & IP Dongle group from 50?

Yes, but custom management software & service charges required.

# 13. Is it possible to increase the concurrent user from 5?

Yes, but custom management software & service charges required.

# 14. Can I manage W series PDUs from different workstations?

Yes, max. 5 concurrent login users from different workstations.

# 15. Why UI shows PDU / PDUs disconnection?

- the PDU is power OFF or
- duplicate the PDU level no. or
- cable loose / defective
- the IP Dongle failsRefer to < 8.2 > IP Dongle
- the W Meter fails Refer to < 8.3 > W Meter
- the power module fails
   Refer to < 8.4 > Power Module

#### 16. Why UI shows Temp. / Temp. + Humid sensor disconnection?

- Temp. / Temp. + humid sensor is NOT connected
- Temp. / Temp. + humid sensor in BAD contact
- Temp. / Temp. + humid sensor is defective

#### **IP Dongle**

# 1. What is the IP Dongle?

The IP Dongle, with patented hot-plug & field replaceable design and SNMP function, provides a simple and economical way to consolidate management of max. 16 pcs of Dual Feed single phase, single & 3 Phase PDUs via a single network IP address to save IP address cost.



# 2. Does IP Dongle have a built-in UI?

Yes, a built-in UI provides a general remote monitoring & control for cascaded PDUs.

However, this built-in UI can only manage up to 16 PDUs in a daisy chain, no any reporting, event & log. If need a complete monitoring & control AND a log & reporting for some hundred PDUs, the free IPM-04 PDU management software is absolutely required.

- 3. Can I use the built-in dongle UI and IPM-04 management software simultaneously? No, only either one.
- 4. Is the IP Dongle essential to IPM-04 management software? Yes, the software can't run without IP Dongle
- Is the IP Dongle essential to SNMP function? Yes, absolutely.
- **6.** Does the IP Dongle support SNMP v2 and v3 ? Yes.

# 7. What is default setting of IP Dongle?

The default IP setting is as below: IP address: 192.168.0.1

Subnet mask: 255.255.255.0 Gateway: 192.168.0.254

#### 8. What is the IP setup utilities?

This is a windows application used to assign the IP address of IP Dongle.

Please find the link below:

http://www.austin-hughes.com/support/utilities/infrapower/IPdongleSetup.msi

#### 9. What are the default ports used in IP setup utilities?

- UTP port: 8880, 8881, 8882, 8883, 8884, 8888, 8889, 8890 & 8891

# 10. Does the IP Dongle support DHCP (Dynamic Host Configuration Protocol)? Yes.

## 11. Will the reset of IP Dongle affect the power to the outlets?

No, the IP Dongle operates on a separate circuit, so the power to the outlets will remain unchanged.

#### **IP Dongle**

#### 12. What are the symptoms if the IP Dongle fails?

- UI shows IP Dongle disconnection and users fail to access the whole cascaded PDUs
- Green LED off of IP Dongle

# 13. Why the IP Dongle fails to work ?

- the IP Dongle itself fails or
- the 1st level W Meter fails or
- the 1st level Power Module fails or
- cable loose or defective between IP Dongle and the network device

# 14. How can I replace a failed IP Dongle?

Download the guide below to replace the IP Dongle:

http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-IP-Dongle.pdf

#### 15. Does the IP dongle have firmware built-in?

Yes

# 16. How can I get the updated IP dongle firmware?

Please find the link below:

http://www.austin-hughes.com/resources/software/infrapower

# 17. Can I remotely update the IP dongle firmware?

Yes

Download the guide below to update the firmware accordingly:

http://www.austin-hughes.com/support/upgradeguide/infrapower/UG-IP-W-IPdongle-Firmware.pdf

#### **W** Meter

#### 1. What are features of the W Meter?

- Support Single phase PDU
- Support switched PDU and outlet amp + kWh measurement
- Simply connect 1 x IP Dongle to access up to 16 PDUs to save IP network address
- SNMP Capability v2 / v3 via IP Dongle
- Sensor port x 2
- 1.8" color LCD
- Built-in buzzer will sound when circuit Amp over alarm setting
- Field replaceable design allows meter replacement without PDU power interruption

# 2. What is the default PDU level?

Level 16

# 3. What is the default outlet status of Switched PDU?

ON

# 4. If one of the cascaded PDU W Meter fails, will it affect the data transmission among PDUs in the same daisy chain ?

No, the meter design prevents this from happening.

# 5. If one of the cascaded W series PDU ( meter ) loses power, will it affect the data transmission among PDUs in the same daisy chain ?

Yes, if the 1st level PDU loses power.

No, if NOT the 1st level PDU loses power.

## 6. What is the maximum cabling distance between two cascaded W series PDUs?

Up to 20 meter (66 feet) via CAT. 5 / 6 cable.

#### 7. What are the symptoms if the W Meter fails?

- if the W Meter PDU is one of that among the 2nd to last level, UI shows PDU disconnection and users fail to access this PDU
- if the W Meter PDU is the 1st level, UI shows IP Dongle disconnection and users fail to access the whole

cascaded PDUs

- W Meter no display

#### 8. Why the W Meter fails to work?

- the W Meter itself fails or
- the Power Module fails and can't supply power to W Meter so the W Meter fails to work or
- the Power Module IC defective and causes W Meter has no data return or
- the LAN cable loose or defective

#### 9. How can I replace a failed W Meter?

Download the guide below to replace the W Meter:

http://www.austin-hughes.com/support/replacementquide/infrapower/RG-IP-W-Meter.pdf



# W Meter

# 10. How accurate is the energy measurement on W Meter?

The W Meter have an accuracy of +/- 1% of reading across the entire power and outlets energy measurement compliant with IEC 62053/ANSI C12.20 Standards



- Ampere squelched to 0A under 0.3A
- Accuracy is not defined below 0.3A.

Functional Specifications - Metering	
Input Metering Range	0.3 to Rated Input Current
Outlet Metering Range	0.3 to 16.0A
Ampere Accuracy (A)	+/- 1%
Voltage Accuracy (V)	+/- 1%
Power Accuracy (kW)	+/- 1%
Energy Accuracy (kWh)	+/- (1%)*hours

#### 11. Does the W meter have firmware built-in?

Yes

#### 12. What can I do if the W Meter turns white?

- Use a pin to press the reset button
- If the symptom still persists, call your dealer for support



---- reset button

# **Power Module**

#### 1. What is feature of the Power Module?

- convert AC to DC for W Meter, IP Dongle & outlet control module
- field replaceable design allows quick replacement

#### 2. How affect the W Meter if the Power Module fails?

It will cause the meter fails to work as below:

- if the W Meter PDU is one of level among the 2nd to the last, UI shows PDU disconnection and users fail to access this PDU
- if the W Meter PDU is the 1st level, UI shows IP Dongle disconnection and users fail to access the whole cascaded PDUs
- W Meter no display and / or no data return

# 3. How affect the switched & measurement WS / WSi / Wi PDU if the Power Module fails ?

- lose outlet On/Off control and outlet amp & kWh measurement
- but outlet can still supply power to device

#### 4. Why the Power Module fails to work?

- the power module itself fails

#### 5. How can I replace a failed Power Module?

For safety, please follow the Power Module replacement guide.

Download the guide below to replace the Power Module:

http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-Power-Module.pdf



#### **Outlet Control Module**

#### 1. How many types of Outlet Control Module?

The outlet control module is a built-in PCB and NOT a hot-swapped & field replaceable design.

- switched & measurement module for WSi switched & outlet level measurement PDU
- outlet measurement module for Wi outlet level measurement PDU
- switched module for WS switched PDU

#### 2. How affect the switched & measurement WS / WSi / Wi PDU if the Outlet Module fails ?

- lose outlet On/Off control and outlet level measurement
- outlet no power supply to device

#### 3. Why the outlet control module fails to work ?

- the outlet control module itself fails

# 4. How can I replace a failed Outlet Control Module?

No, not like W Meter & Power Module, Outlet Control Module is NOT hot-swapped & field replaceable design. You have to replace the whole PDU.

# 5. How can I replace a failed PDU?

Download the guide below to replace the PDU : <a href="http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-PDU.pdf">http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-PDU.pdf</a>

#### 6. What status the outlet LED means for WS / WSi switched PDU?

LED in Solid Blue : Outlet ON LED Not lit : Outlet OFF

# 7. How the outlets react when the user power up the WS / WSi switched PDU?

Outlets power ON sequentially

#### 8. Why the outlet LED Not lit but the outlets still ON power status?

The outlet LED is defective.

# **TH Sensors**

#### 1. How accurate is the Temp. & Humid. sensor?

 $\pm$  1°C (typical) &  $\pm$  4.5% RH (typical)

# 2. How accurate is the Temp. sensor?

± 1.5°C (typical)

#### 3. What is the default TH setting?

Default: Deactivate

#### 4. Is the TH sensor plug-n-play?

Yes, but only for the local meter display.

No, for management software UI. You have to activate the sensor in < TH Sensor >.

Note: never activate if no sensor connection

#### **Others**

# 1. Will the PDU settings remain unchanged after power OFF?

Yes, the settings will remain unchanged such as PDU & Outlet Name, Location, Alarm amp., Low alert amp. ......

# 2. Does the InfraPower PDU has the over ampere protection?

Yes, the optional resettable fuse and circuit breaker available.

# 3. What is the standard inlet cable length of InfraPower PDU?

3 meter (9.9 feet)

#### 4. Where can I find the Catalogue / User manual / Model list / Wire diagram of InfraPower PDUs?

Please visit the www.austin-hughes.com

# 5. How can we get a further support?

Please send the email to <a href="mailto:support@austin-hughes.com">support@austin-hughes.com</a> or <a href="mailto:support@austin-hughes.com">sales@austin-hughes.com</a> or <a href="mailto:support@austin-hughes.com">support@austin-hughes.com</a> or <a href="mailto:support@austin-hughes.com">sales@austin-hughes.com</a> or <a href="mailto:sup