

# **ADVANTAGE SERIES**

# FIRMWARE RELEASE NOTES

Version 1.0.5.8

22-June-2020

#### **ADVANTAGE SERIES**

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## 1 GENERAL

#### 1.1 SCOPE

This document is the Release Notes for Advantage Series Firmware Version 1.0.5.8

#### 1.2 ABBREVIATIONS AND ACRONYMS

A list of the principal abbreviations and acronyms used in the document is provided here for a better understanding of this document.

PDU	Power Distribution Unit
GUI	Graphical User Interface
SSH	Secure shell
SNMP	Simple Network Management Protocol
SMTP	Simple Mail Transfer Protocol
LDAP	Lightweight Directory Access Protocol
CLI	Command Line Interface
Conf	Configuration
СВ	Circuit Breaker
FTPS	File Transfer Protocol Secure
MAC	Media Access Control
NTP	Network Time Protocol
IP	Internet Protocol
ETH	Ethernet
SKU	Stock Keeping Unit

### **2 RELEASED FILES**

#### 2.1 PACKAGED FILE

**ENLOGIC.TAR** 

Image File	MD5		
zImage	b1672b232eed018be34db1984a880dc7		
u-boot.bin	e04f4b42b5dd51978d9d66138273e97e		
rootfs.ubi	98e3a05d3e140235def4eebccc000011		
at91bootstrap.bin	c2126c33fee8518915287b649d3d0e74		
at91-sama5d3_xplained.dtb	2f2c0bd4de47ffd117452155b986662a		

### 2.2 SOFTWARE VERSION

FIRMWARE VERSION – 1.0.5.8 webui – 1.0.5

## **3 PRODUCT FAMILY**

Product Type	Description				
Input Metered (MI)	PDU that have ability for aggregate power monitoring				
Outlet Metered (MO)	PDU that have ability to aggregate outlet level power monitoring				
Switched (MISO)	PDU that have ability to aggregate power monitoring and outlet level switching capability				
Metered and Switched per Outlet (MOSO)	PDU that have ability to aggregate outlet level power monitoring and outlet level switching capability				
Inline Energy Meter (IEM)	Inline Energy Meter that have ability to monitor power for attached IT equipment				

## 4 SKU SUPPORTED

Туре	SKU Numbers		
Input Metered (MI)	EN1403, EN1805S, EN1902, EN1906, <b>EN1337, EN1315, EN1806, EN1326, EN1811, EN1815, EN1908, EN1907, EN1339</b>		
Outlet Metered (MO)	EN5808, EN5810, EN5402, EN5329, EN5325		
Switched (MISO)	EN2316E, EN2804S, EN2808, <b>EN2324</b> , <b>EN2325</b> , <b>EN2810</b> , <b>EN2326</b> , <b>EN2333</b> , <b>EN2329</b> , <b>EN2402</b> , <b>EN2902</b> , <b>EN2804</b> , <b>EN2907</b> , <b>EN2317</b> , <b>EN2812</b>		
Metered and Switched per Outlet (MOSO)	EN6324, EN6804, EN6333, EN6808, EN6810, EN6902, <b>EN6325</b> , <b>EN6602</b> , <b>EN6329</b> , <b>EN6402</b> , <b>EN6804S</b> , <b>EN6338</b> , <b>EN6326</b> , <b>EN6337</b>		
Inline Energy Meter (IEM)	EZ1732, EZ1632, EZ1616, EZ1430		

## **5 PDU FEATURES ENABLED**

FEATURES	INPUT METERED (MI)	OUTLET SWITCHED (MS)	OUTLET METERED (MO)	METERED AND SWITCHED PER OUTLET (MOSO)
DESIGN				
<ul> <li>Low profile, space saving design</li> <li>Ultra-low-profile circuit breakers on most models</li> <li>Adjustable tool-less mounting system</li> </ul>	YES	YES	YES	YES
PDU POWER MONITORING				
<ul> <li>PDU level watt hour power metering (kWh)</li> <li>PDU level power measurements (W)</li> <li>Input phase level power measurements (V, A, VA, kWh, pf)</li> <li>Circuit Breaker level current measurements</li> <li>High accuracy, billing grade metering capabilities</li> <li>Embedded memory log to record/view/report historical data</li> <li>User customizable alarm thresholds &amp; notifications</li> </ul>	YES	YES	YES	YES
OUTLET LEVEL SWITCHING		YES		YES
<ul> <li>Remote ON/OFF Power control by individual outlet</li> <li>User defined power-on time delay to sequence IT equipment</li> <li>Automatic sequencing to avoid inrush current overload</li> <li>Controlled with assignable roles and user access</li> </ul>				
OUTLET LEVEL POWER MONITORING			YES	YES
<ul> <li>Outlet level watt-hour power metering(kWh</li> <li>Outlet level power measurements (V, A, VA, W, pf)</li> </ul>	·			
ENVIRONMENTAL MANAGMENT				
<ul> <li>Optional Plug and Play environmental sensors including temperature, humidity an water leak</li> </ul>	YES	YES	YES	YES
PHYSICAL SECURITY MANAGEMENT				
<ul> <li>Rack access monitoring with door contact switch</li> <li>Customizable alarm thresholds and notifications</li> </ul>	YES	YES	YES	YES

#### **ADVANTAGE SERIES**

NETWORK MANAGEMENT AND LOCAL DISPLAY INTERFACE	YES	YES	YES	YES
<ul> <li>Active LED display for power measurements</li> <li>OLED Display with high contrast ratio, easy to navigate menu and visual graphic bars for phase load balancing</li> <li>Full featured network management and alerting capabilities supporting HTTP, HTTPS, SSH, SNMP, FTP and EMAIL</li> <li>Strong encryption, passwords and advanced authorization options including local permissions, LDAP and Active Directory</li> <li>Daisy Chain up to 4 Rack PDU and 16 environmental sensors through single IP address</li> </ul>				
BRANCH CIRCUIT LOAD MONITORING	YES	YES	YES	YES
CIRCUIT BREAKER STATUS		YES	YES	YES

#### 6 ISSUES AND TASKS ADDRESSED

Issue ID	Description
E0B-961	EN2812 SKU Addition
E0B-967	SNMP SysDesr Table Needs update
E0B-847	sensor communication loss traps received in between the PDU activity if serial is connected

#### 7 FEATURE UPDATES FROM 1.0.4.4 BUILD TO 1.0.5.8

- Firmware upload from 1.0.4.4 to 1.0.5.8 takes around 7 minutes, however subsequent upgrades 1.0.5.1 onwards would be normal around 2 minutes
- Firmware upload from 1.0.5.1/3 to 1.0.5.8 does take normal update time around 2 minutes
- Daisy Chain communication is optimized
- Firmware stability with web page navigation over https is optimized
- Events are categorized under individual icons
- Event logs size increased from 256 KB to 3MB and backup mechanism of event logs introduced, Event logs can hold events up to 10,000 entries
- GUI automatic refresh introduced for Total load percentage
- Network Page optimized for graceful reboot on NTP and DST changes