

# **ADVANTAGE SERIES**

# FIRMWARE RELEASE NOTES

Version 2.0.4.3 06-SEP-2022

#### **ADVANTAGE SERIES**

# **TABLE OF CONTENTS**

1	GENERAL		. 3
	1.1	Scope	. 3
	1.2	Abbreviations and acronyms	. 3
2	RELEASE	O FILES	. 3
	2.1	Packaged File	. 3
	2.2	Software Version	. 4
3	PRODUCT	FAMILY	. 4
4	SKU SUPI	PORTED	. 4
5	PDU FEAT	TURES ENABLED	. 5
6	ISSUES A	ND TASKS ADDRESSED	. 7
7	FEATURE	UPDATES FROM 1.0.6.1 BUILD TO 2.0.4.3	. 7

#### 1 GENERAL

#### 1.1 SCOPE

This document is the Release Notes for Advantage Series Firmware Version 2.0.4.3

#### 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
<i>SMTP</i>	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** - [SHA256: dadc8e98fd3dcc213dcfd6b4844f951c444744cc16eef9b342649a452085e3cf]

Image File	SHA256
zlmage	b87d92d0253070d92449d072e9ab1b6fcc432d2a43132a975e7eda95eb2e5d21
u-boot.bin	983905b607b235745320dfb3ddb08bda181403694738f9d33a01723cca25feef
rootfs.ubi	f2c91e043dba98039affd44161c6d526e5cf24f57445f6b032be6d1d1ab79565
at91bootstrap.bin	8096ec83fb3f045ecdf6f8fe37d3b93616959f1c768f3bdd0a378869ec01ea29
at91-sama5d3_xplained.dtb	559874566b82455a7e14f5040c2c0d4ad20236997ecd0901142f1fc34baf8315

### 2.2 SOFTWARE VERSION

FIRMWARE VERSION – 2.0.4.3

# **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 has ability to monitor power for attached IT equipment				

## **4 SKU SUPPORTED**

Туре	SKU Numbers
Input Metered (MI)	EN1403, EN1805S, EN1902, EN1906, <b>EN1337</b> , <b>EN1315</b> , <b>EN1806</b> , <b>EN1326</b> , <b>EN1811</b> , EN1815, <b>EN1908</b> , EN1907, <b>EN1339</b> , <b>EN1341</b> , EN1927, <b>EN1822</b> , <b>EN1814</b> , EN1823, EN1821, EN1926, EN1343, EN1805, EN1917, EN1915, <b>EN1919</b> , EN1325, EN1932
Outlet Metered (MO)	EN5808, EN5810, EN5402, EN5329, EN5325, EN5337
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> , <b>EN2337</b> , <b>EN2403</b> , <b>EN2823</b> , <b>EN2339</b> , <b>EN2404</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> , <b>EN6833</b> , <b>EN6829</b> , <b>EN6909</b> , <b>EN6908</b> , <b>EN6834</b> , <b>EN6905</b> , <b>EN6812</b>
Inline Energy Meter (IEM)	EZ1732, EZ1632, EZ1616, EZ1430, EZ1663, EZ1560, EZ1550, EZ1716, EZ1763, EZ1530

## **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  Remote ON/OFF Power control by individual outlet  User defined power-on time delay to sequence IT equipment Automatic sequencing to avoid inrush current overload Controlled with assignable roles and user access		YES		YES
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 and water leak</li> </ul>	YES	YES	YES	YES
PHYSICAL SECURITY MANAGEMENT				
<ul> <li>Rack access monitoring with door contact switch</li> </ul>	YES	YES	YES	YES

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

#### **6 ISSUES AND TASKS ADDRESSED**

Issue ID	Description
LNX-106	EN20: EN2404 SKU Creation
LNX-296	EN20: EN5337 SKU Update

#### 7 FEATURE UPDATES FROM 1.0.6.1 BUILD TO 2.0.4.3

- Daisy Chain up to 64 PDU
- Redfish Support as per latest DMTF
- IPv6 Support Enabled
- Radius Server support Enabled
- Alarm Count increased to 80
- Trap OID mapping to its severity
- Daisy Chain communication optimized between Master and Slave PDUs
- GUI automatic refresh introduced for Control & Manage, Thresholds
- 7 Segment Border color selection for all PDUs connected in Daisy Chain
- Ehandle Support Enabled
- Automatic Firmware update to Daisy chain PDUs
- New Kernel (5.10.56) Update
- Modbus Support
- System Log Support
- Implemented Reset Crash Dump
- 1 Gbps Support