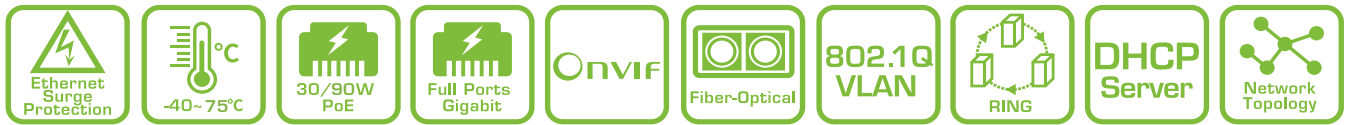


D60/D60-V2 series

Industrial L2 PRO Gigabit PoE Switches



The D60 / D60-V2 series of Industrial Pro L2 Plus Managed PoE Switches are designed with 6KV Ethernet port surge protection and harden-graded standard to operate between -40°C and 75°C for harsh weather conditions. They enable outdoor connections of PoE PDs to the network such as outdoor IP cameras, wireless APs, and other outdoor industrial applications.

The D60 / D60-V2 series provides multi-port Gigabit PoE (10M/100M/1G) delivering data and power to PoE PDs over a single network cable and additional SFP transceiver slots for flexible uplink. The D60 series has three sub models classified as power source equipment (PSE) and provide PoE budget up to 30W or 60W per port.

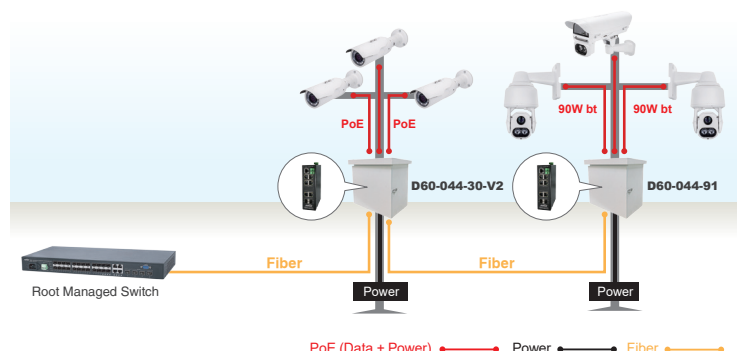
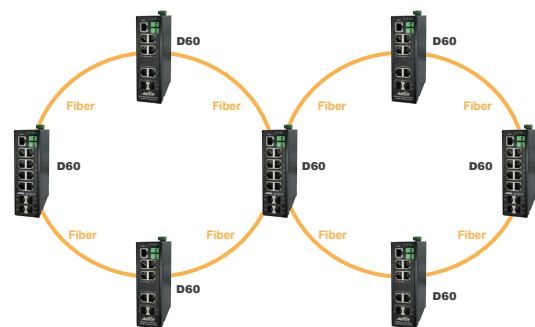
Besides general functions of L2 plus & basic L3 switch such as QoS, security, spanning tree, cable length measurement, and SNMP v1/v2c/v3, a dedicated web graphic user interface of IP surveillance is easy to configure and manage IP device. It automatically generates network topology maps, cable diagnostic, and PoE management.

Features

- Layer 2 Switch
 - 802.1d (STP), 802.1w (RSTP), 802.1s (MSTP)
 - Loop protection
 - SNMP v1/v2c/v3
 - QoS
 - VLAN
 - Ethernet cable length measurement
 - DHCP Server
- Network Topology System
 - Automatic discovery for ONVIF camera
 - Generates camera topology map automatically
 - Cable diagnostic & reboot camera remotely
 - PoE management
 - Topology view / Floor view / Google map
 - Monitor / Configure / Manage ONVIF camera thru web
- Flexible SFP transceiver ports for uplink
- Operating temperature between -40°C and 75°C
- Compliant IEEE802.3at 30W per port (D60-044-30-V2, D60-084-30-V2)
- 90W bt/PoH PoE per port (D60-044-90)
- 90W bt PoE per port (D60-044-91)
- Supports 10/100/1000Mbps data rates
- 6KV PoE surge protection
- IEEE 802.3az Energy Efficient Ethernet standard for green power

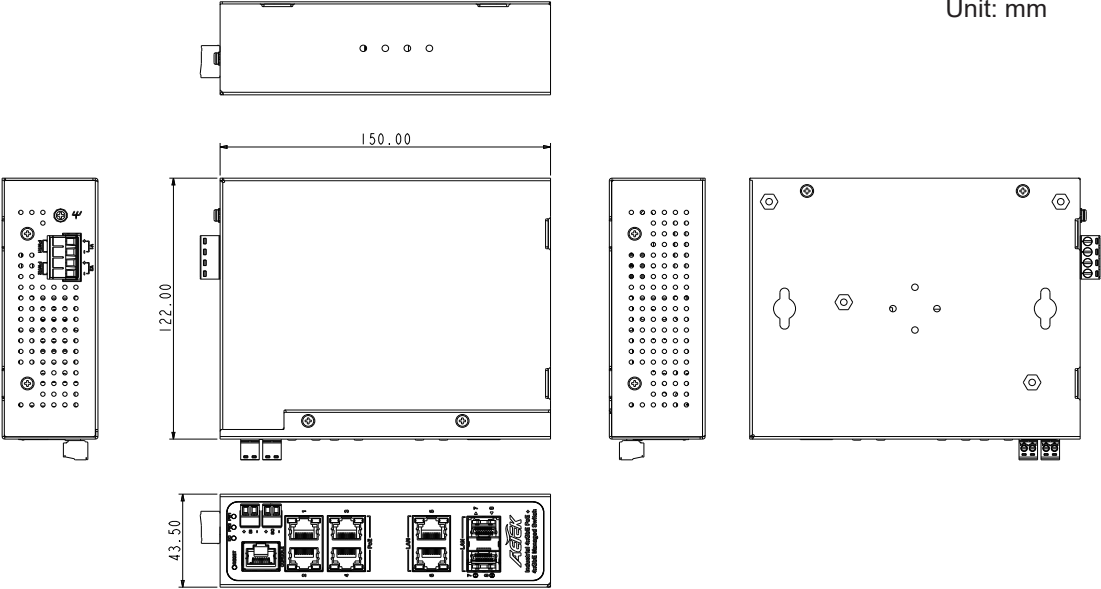
Applications

Dual Ring

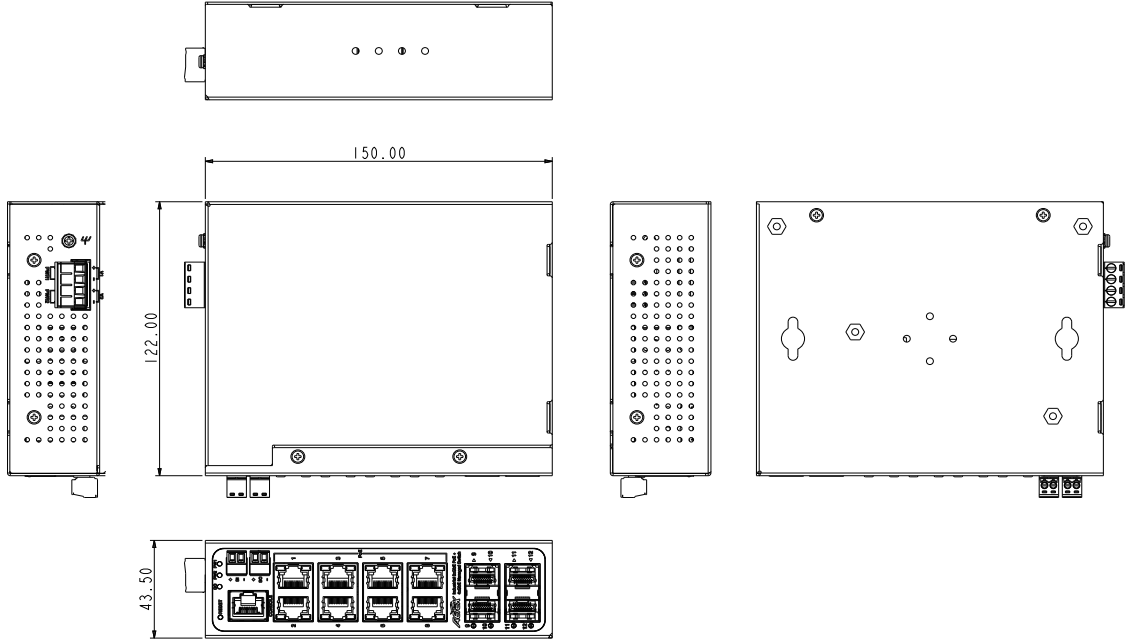


D60-044-30-V2

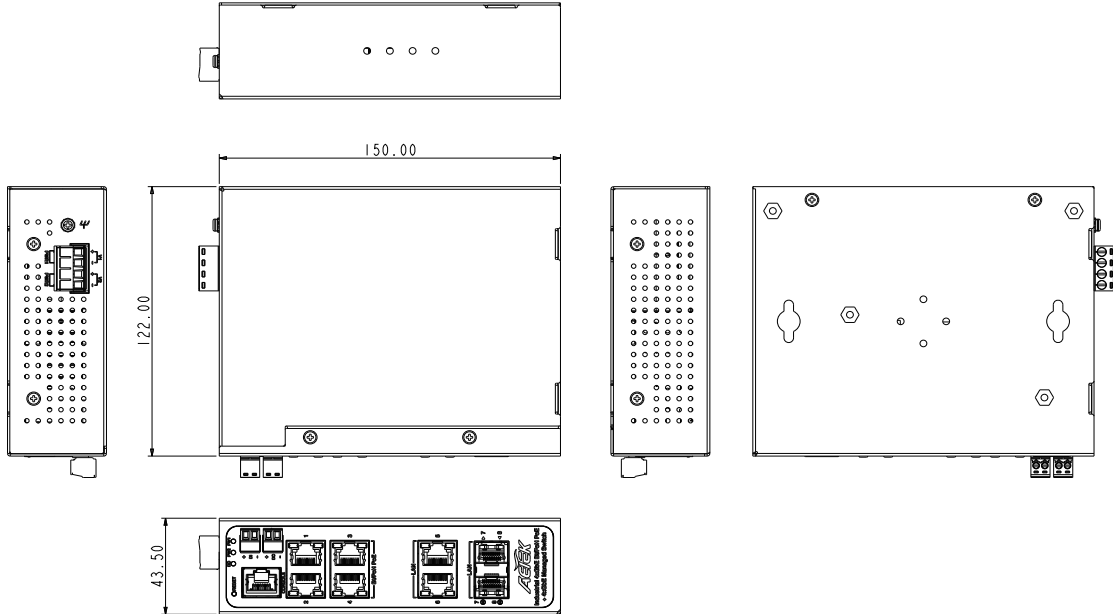
Unit: mm



D60-084-30-V2



D60-044-90 / D60-044-91



Device List

Show 10 entries

Search:

Status	Device Type	Model Name	Device Name	MAC	IP Address
Online	PoESW	H60-084-30-250	H60-8p @ 203 name	68:8D:B6:00:CB:00	192.168.10.203
Online	PoESW	H60-084-30-250	H60-8p @ 209 name	68:8D:B6:00:D1:00	192.168.10.209
Online	IPMX	M6000-AIW	M6000-AIW	68:8D:B6:01:E1:B1	192.168.10.165
Online	IP Camera	SNC-VB635	Sony	D8:D4:3C:DD:F5:C7	192.168.10.122
Online	IP Camera	WV-S1131	Panasonic_WV-S1131	BC:C3:42:71:79:D0	192.168.10.104
Online	IPSG	SD-504	SD-504	68:8D:B6:00:00:01	192.168.10.108
Online	PC	General Computer	FC2564	00:50:56:2D:FA:AC	192.168.10.201
Online	Others	Unknown model	Unknown name	04:D4:C4:2C:B5:EC	192.168.10.1
Online	Others	Unknown model	Unknown name	94:C6:91:5F:9E:EA	192.168.10.180
Online	PC	General Computer	MIS-TEMP-NB4	A0:A8:CD:26:FE:FD	192.168.10.192

Showing 1 to 10 of 29 entries

Previous

1

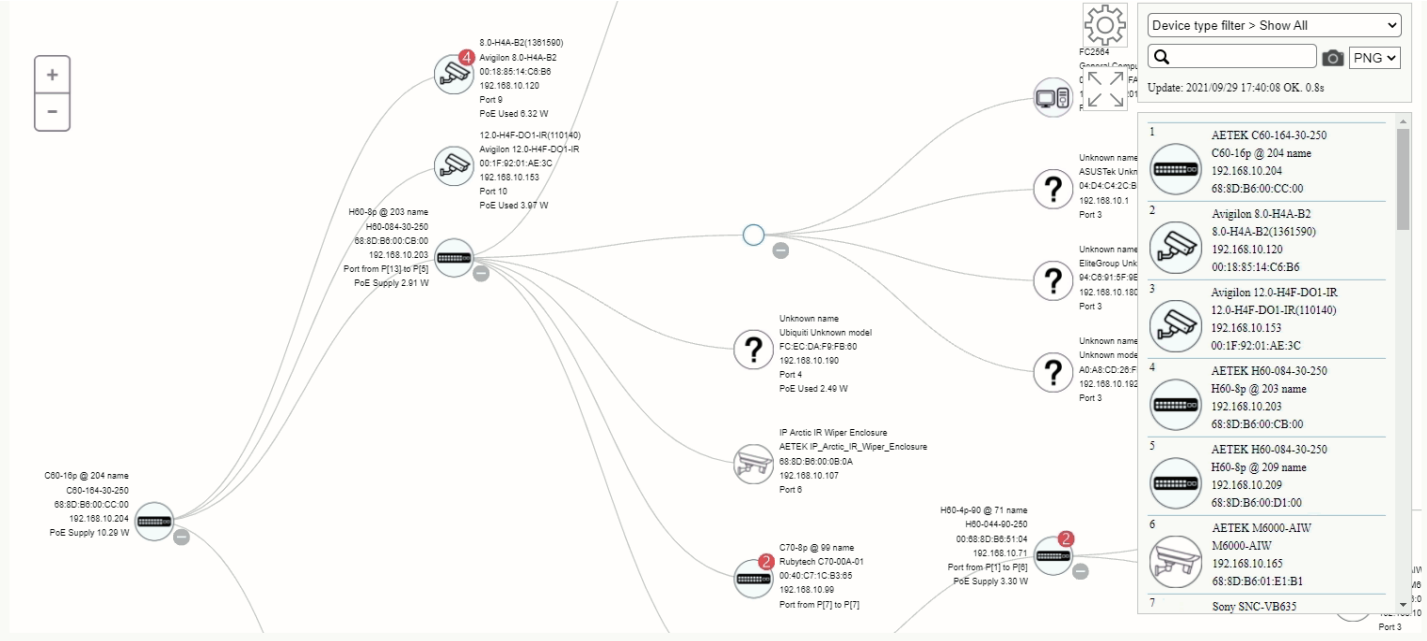
2

3

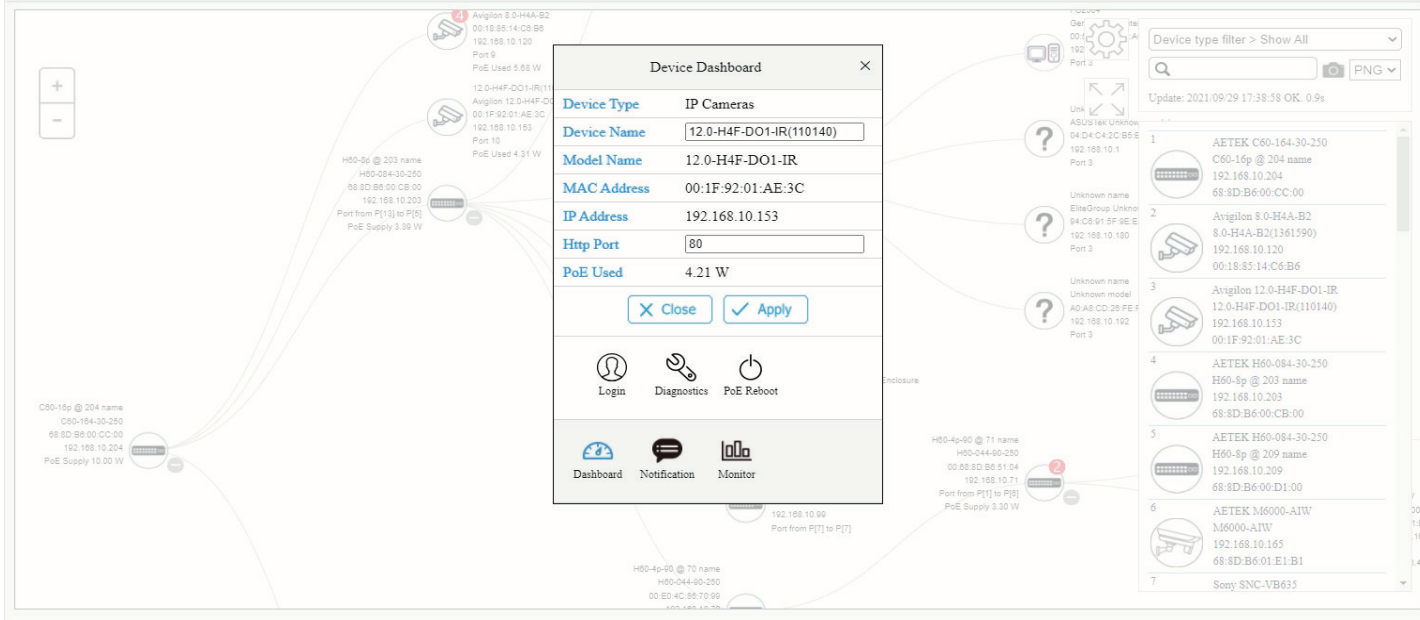
Next

Edit

Topology View



Device Dashboard



Floor Map View

Device Dashboard

Device Type	PoE Switches
Device Name	H60-4p-90 @ 73 name
Model Name	H60-044-90-250
MAC Address	00:E0:4C:51:04:0A
IP Address	192.168.10.73
Http Port	80
PoE Supply	0 W
API Account	admin73
API Password	passwd73

Close Apply

Login Upgrade PoE Config Diagnostics

Dashboard Notification

Device List:

Device Type	Device Name	Model Name	MAC Address	IP Address	Http Port	PoE Supply	API Account	API Password
AETEK C60-164-30-250	C60-16p @ 204 name	192.168.10.204	68:8D:B6:00:CC:00					
Avigilon 8.0-H4A-B2	8.0-H4A-B2(1361590)	192.168.10.120	00:18:85:14:C6:B6					
Avigilon 12.0-H4F-DO1-IR	12.0-H4F-DO1-IR(110140)	192.168.10.153	00:1F:92:01:AE:3C					
AETEK H60-084-30-250	H60-8p @ 203 name	192.168.10.203	68:8D:B6:00:CB:00					
AETEK H60-084-30-250	H60-8p @ 209 name	192.168.10.209	68:8D:B6:00:D1:00					
AETEK M6000-AIW	M6000-AIW	192.168.10.165						

Update: 2021/09/29 17:44:22 OK. 0.7s

Draggable: ONE

Google Map View

Device Dashboard

Device Type	PoE Switches
Device Name	H60-8p @ 203 name
Model Name	H60-084-30-250
MAC Address	68:8D:B6:00:CB:00
IP Address	192.168.10.203
Http Port	80
PoE Supply	2.54 W
API Account	admin203
API Password	passwd203

Close Apply

Upgrade PoE Config

Dashboard Notification

Device List:

Device Type	Device Name	Model Name	MAC Address	IP Address	Http Port	PoE Supply	API Account	API Password
AETEK C60-164-30-250	C60-16p @ 204 name	192.168.10.204	68:8D:B6:00:CC:00					
Avigilon 8.0-H4A-B2	8.0-H4A-B2(1361590)	192.168.10.120	00:18:85:14:C6:B6					
Avigilon 12.0-H4F-DO1-IR	12.0-H4F-DO1-IR(110140)	192.168.10.153	00:1F:92:01:AE:3C					
AETEK H60-084-30-250	H60-8p @ 203 name	192.168.10.203	68:8D:B6:00:CB:00					
AETEK H60-084-30-250	H60-8p @ 209 name	192.168.10.209	68:8D:B6:00:D1:00					
AETEK M6000-AIW	M6000-AIW	192.168.10.165						

Update: 2021/09/29 17:48:45 OK. 1.4s

Draggable: ONE Animation: OFF

Cable Diagnostics

Diagnostics

Device Type	IP Cameras
Device Name	12.0-H4F-DO1-IR(110140)
Model Name	12.0-H4F-DO1-IR
MAC Address	00:1F:92:01:AE:3C
IP Address	192.168.10.153

Icon Diagnostic

Icon	Diagnostic
1	AETEK C60-164-30-250 C60-16p @ 204 name 192.168.10.204 68:8D:B6:00:CC:00 Port 10: ✔ Connection ok Speed: 100M ✔ Cable Status ok
3	Avigilon 12.0-H4F-DO1-IR 12.0-H4F-DO1-IR(110140) 192.168.10.153 00:1F:92:01:AE:3C

Back

Device List:

Device Type	Device Name	Model Name	MAC Address	IP Address	Http Port	PoE Supply	API Account	API Password
AETEK C60-164-30-250	C60-16p @ 204 name	192.168.10.204	68:8D:B6:00:CC:00					
Avigilon 8.0-H4A-B2	8.0-H4A-B2(1361590)	192.168.10.120	00:18:85:14:C6:B6					
Avigilon 12.0-H4F-DO1-IR	12.0-H4F-DO1-IR(110140)	192.168.10.153	00:1F:92:01:AE:3C					
AETEK H60-084-30-250	H60-8p @ 203 name	192.168.10.203	68:8D:B6:00:CB:00					
AETEK H60-084-30-250	H60-8p @ 209 name	192.168.10.209	68:8D:B6:00:D1:00					
AETEK M6000-AIW	M6000-AIW	192.168.10.165						
Sony SNC-VB635								

Update: 2021/09/29 17:40:48 OK. 0.7s

Draggable: ONE Animation: OFF

PoE Features

- IEEE802.3at (PoE+ 30W),bt 90W
- Max. allowed 30W / 90W per port
- Port status table

PoE Port Configuration					
Local Port	PD Class	Power Used	Current Used	Priority	Port Status
1	-	0.00 [W]	0 [mA]	high	No PD detected
2	-	0.00 [W]	0 [mA]	high	No PD detected
3	-	0.00 [W]	0 [mA]	high	No PD detected
4	class0	2.65 [W]	50 [mA]	high	on
5	-	0.00 [W]	0 [mA]	high	No PD detected
6	-	0.00 [W]	0 [mA]	high	No PD detected
7	-	0.00 [W]	0 [mA]	high	No PD detected
8	-	0.00 [W]	0 [mA]	high	No PD detected
Total		2.00 [W]			
Apply Refresh					

Specifications - Software

PoE Management	
Port Configuration	Supports per port PoE configuration function
PoE Scheduling	Supports per port PoE scheduling to turn on/off the PoE devices (PDs).
Auto-checking	Check the link status of PDs. Reboot PDs if there is no responses
Power Delay	The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs.
IP Surveillance Graphical User Interface Specifications	
Automatic Discovery	Discover IP cameras complying ONVIF automatically
Topology View	Generate Topology maps to manage IP cameras
Floor view	It's easy to drag and drop PoE devices and help you to build smart workforces
Map view	Enhance efficiency to drag and drop devices and monitor surroundings on google map
Traffic Monitoring	Comprehensive chart to show traffic status
PoE Management	Reboot IP camera, Scheduling PoE on/off, alive checking, Power delay as PoE switch boots up, PoE configuration
Layer 2 Switching Specifications	
Spanning Tree Protocol	MAC Bridges Standard Spanning Tree (STP) 802.1d, Rapid Spanning Tree (RSTP) 802.1w, Multiple Spanning Tree (MSTP) 802.1s
IP/Mac Port Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad , Static aggregation.
VLAN	Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs), Port-based VLAN, 802.1Q tag-based VLAN
IGMP v1/v2 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters.
Layer 3 Switching Specifications	
DHCP Server	Assign IP to DHCP clients
Security	
IEEE 802.1X	IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions, Supports IGMP-RADIUS based 802.1X, Dynamic VLAN assignment
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
Loop Protection	To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
DHCP Snooping	To prevent attackers from adding their own DHCP servers to the network.
QoS	
Classification	Port based, 802.1p VLAN priority based
Bandwidth Control	Ingress policer, Egress shaping and rate control, Per port
Management software	
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
IEEE 802.1ab (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network, Support LLDP-MED extensions
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
SNMP	SNMP version1, 2c, 3
Flow Control	The IEEE 802.3x standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats
IEEE 802.3az	Energy Efficient Ethernet standard for green power
Firmware Upgrade	Web browser upgrade HTTP and TFTP
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	System, HTTP, DHCP Client, Cable Diagnostics, Syslog, IPV4/IPV6 Management, SSH, Telnet

Specifications

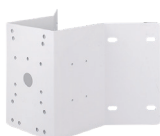
	D60-044-30-V2	D60-084-30-V2	D60-044-90	D60-044-91
Networking				
Total Gigabit Ethernet Ports	8	12	8	8
Gigabit Ethernet 802.3af/at/bt PoE Ports	4 x 30W at PoE	8 x 30W at PoE	4 x 90W bt/PoH PoE	4 x 90W bt PoE
Gigabit Ethernet SFP Ports (100M/1G)	2	4	2	2
Gigabit Ethernet RJ45 Ports	2	-	2	2
Forwarding Capacity	11.904Mpps	17.856Mpps	11.904Mpps	11.904Mpps
Mac Table	8K	8K	8K	8K
Jumbo Frames	9,216 Bytes	9,216 Bytes	9,216 Bytes	9,216 Bytes
Switching Capacity	16 Gbps	24 Gbps	16 Gbps	16 Gbps
Power				
Input Voltage	Dual 48-56VDC	Dual 48-56VDC	Dual 48-56VDC	Dual 48-56VDC
Output Power per PoE Port	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt/PoH (Max. 90W)	PoE IEEE 802.3af (Max. 15.4W) PoE+ IEEE 802.3at (Max. 30W) PoE++ IEEE 802.3bt (Max. 90W)
Output PoE Power Pin Assignment	12(-), 36(+)	12(-), 36(+)	12(-), 36(+), 45(+), 78(-)	12(-), 36(+), 45(+), 78(-)
System Power Consumption (without PoE)	10W	10W	10W	10W
PoE Output Power Budget	120W	240W	360W	360W
Surge Protection per PoE Port	6KV	6KV	6KV	6KV
Mechanical				
Dimensions (W x D x H)	43.5 x 122 x 150 mm	43.5 x 122 x 150 mm	43.5 x 122 x 150 mm	43.5 x 122 x 150 mm
Weight	0.43 kg (0.95 lb)	0.46 kg (1.01 lb)	0.57 kg (1.26 lb)	0.57 kg (1.26 lb)
DI/DO	1/1	1/1	1/1	1/1
Console	RJ45	RJ45	RJ45	RJ45
Reset Button	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default	2~7 sec.: Reset 7~12 sec.: Restore default
Environmental				
IP Rating	IP30	IP30	IP30	IP30
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)	-40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Humidity	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing	5% ~ 95% non-condensing
Certifications				
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Safety	EN62368-1	EN62368-1	-	-
Surge	EN61000-4-5	EN61000-4-5	EN61000-4-5	EN61000-4-5
Shock	IEC 60068-2-27	IEC 60068-2-27	IEC 60068-2-27	IEC 60068-2-27
Free Fall	IEC 60068-2-31	IEC 60068-2-31	IEC 60068-2-31	IEC 60068-2-31
Vibration	IEC 60068-2-6	IEC 60068-2-6	IEC 60068-2-6	IEC 60068-2-6

Ordering Information

PoE Switches			
	D60-044-30-V2 • 4xGbE 30W at PoE + 2xGbE SFP + 2xGbE RJ45		D60-044-90 • 4xGbE 90W bt / PoH PoE + 2xGbE SFP + 2xGbE RJ45
	D60-084-30-V2 • 8xGbE 30W at PoE + 4xGbE SFP		D60-044-91 • 4xGbE 90W bt PoE + 2xGbE SFP + 2xGbE RJ45

Optional Accessories

SFP Modules			
 SFP-ISX-X5 Industrial Gigabit SFP Transceiver • MMF • 0.5 km • -40°C ~85°C	 SFP-ISX-02 Industrial Gigabit SFP Transceiver • MMF • 2 km • -40°C ~85°C	 SFP-ILX-10 Industrial Gigabit SFP Transceiver • SMF • 10 km • -40°C ~85°C	 SFP-ILX-40 Industrial Gigabit SFP Transceiver • SMF • 40 km • -40°C ~85°C

Pole Mount		Corner Mount	Junction Box
			
AT-100 Pole Mount Adapter	AT-101 Pole Mount Adapter	AT-200 Corner Mount Adapter	JB-200 Junction Box

Industrial Power Supply		
 DRL-48V120W1EN Indoor Industrial Din Rail Power Supply, 48V/120W	 DRL-48V240W1EN Indoor Industrial Din Rail Power Supply, 48V/240W	 DRL-48V480W1EN Indoor Industrial Din Rail Power Supply, 48V/480W