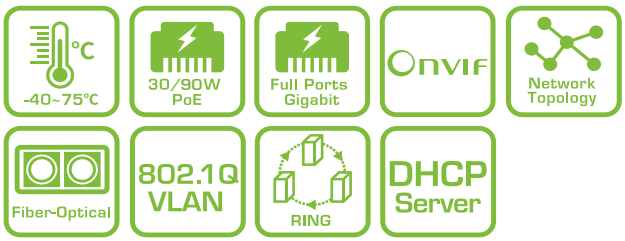
D60-DC/D60-DC-V2 series

Industrial L2 PRO Gigabit PoE Switches with 12-56V DC Input



The D60-DC / D60-DC-V2 series of Industrial PRO L2 PoE Switches are designed 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.

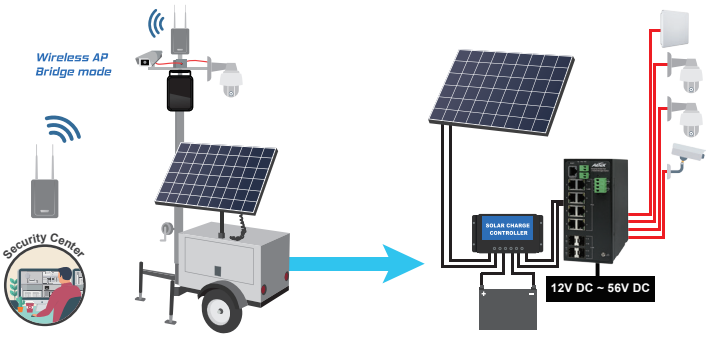
The D60-DC / D60-DC-V2 series provides multi-port Gigabit PoE (10M/100M/1G) delivering data and power to PoE PDs over a single network cable and additional SFP transceiver slots for flexible uplink. The D60 series has three sub models classified as power source equipment (PSE) and provide PoE budget 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-DC-V2, D60-084-30-DC-V2)
- 90W bt/PoH PoE per port (D60-044-90-DC)
- 90W bt PoE per port (D60-044-91-DC)
- Supports 10/100/1000Mbps data rates
- IEEE 802.3az Energy Efficient Ethernet standard for green power

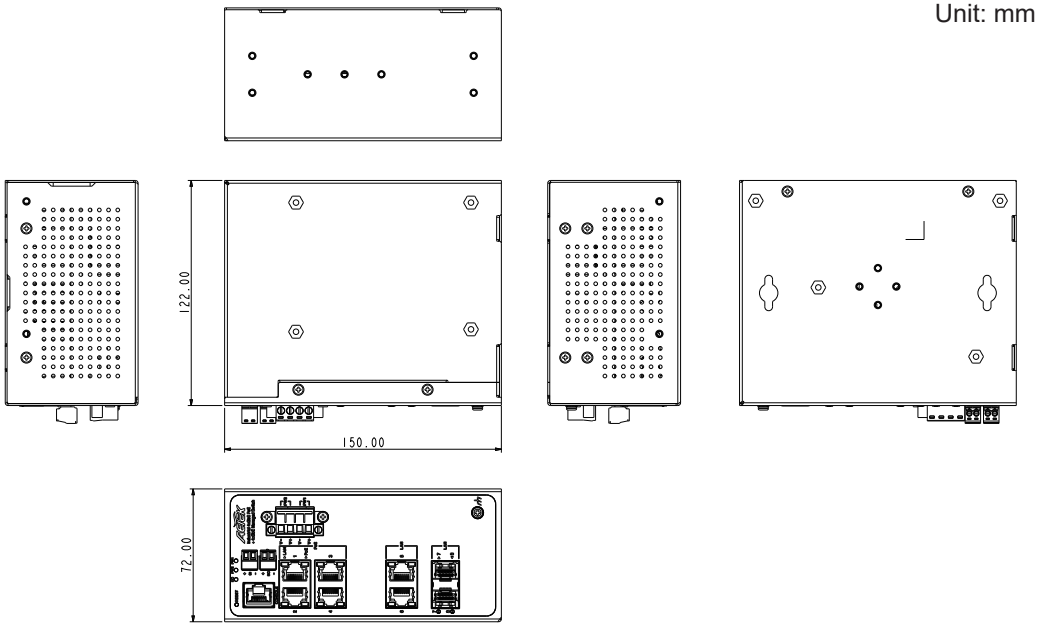
Applications



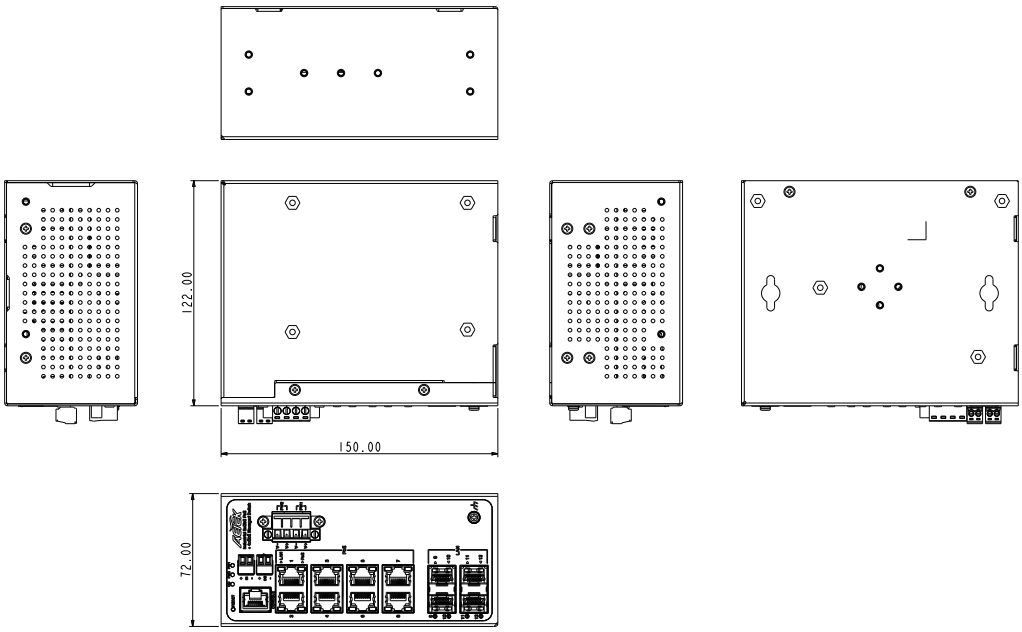
Dimension

D60-044-30-DC-V2

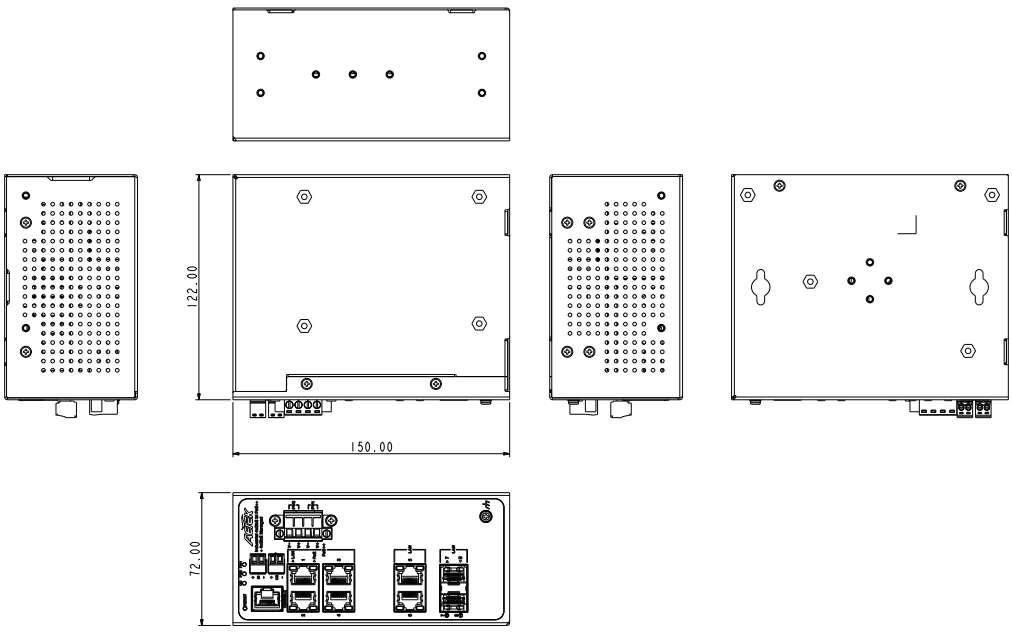
Unit: mm



D60-084-30-DC-V2



D60-044-90-DC / D60-044-91-DC



IP Camera Controller Features

Device List

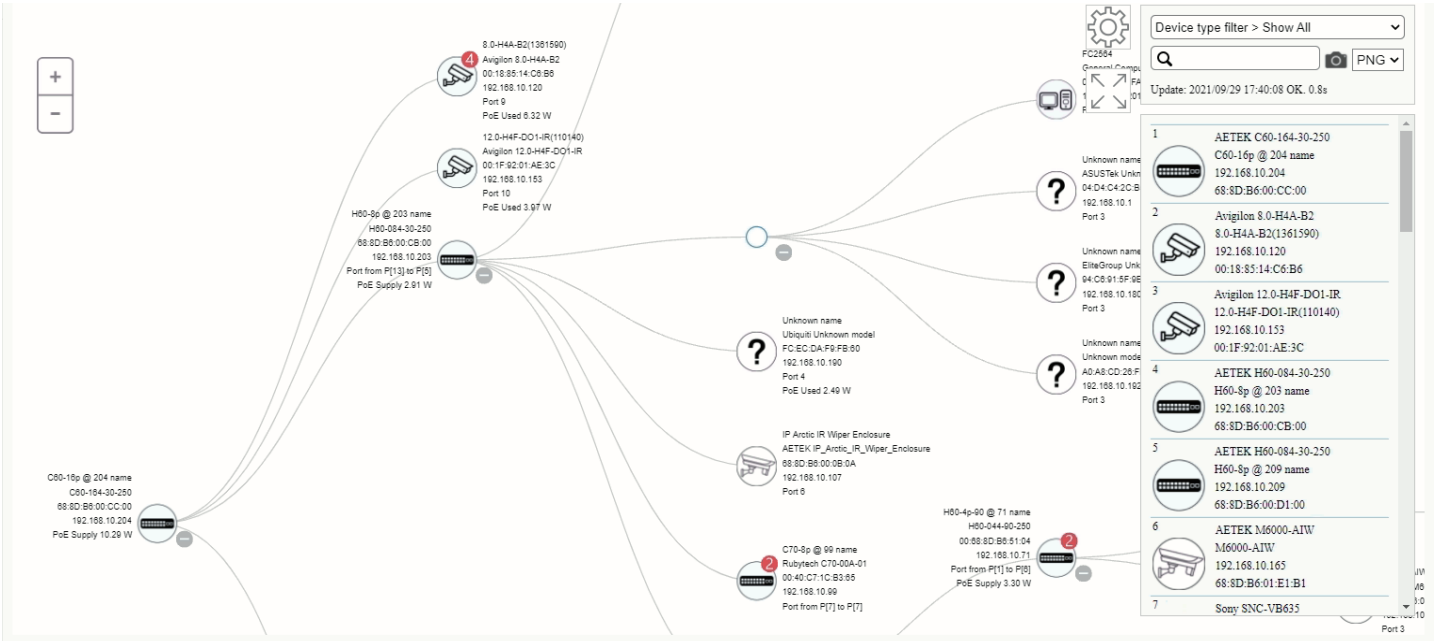
Show 10 entries Search:

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

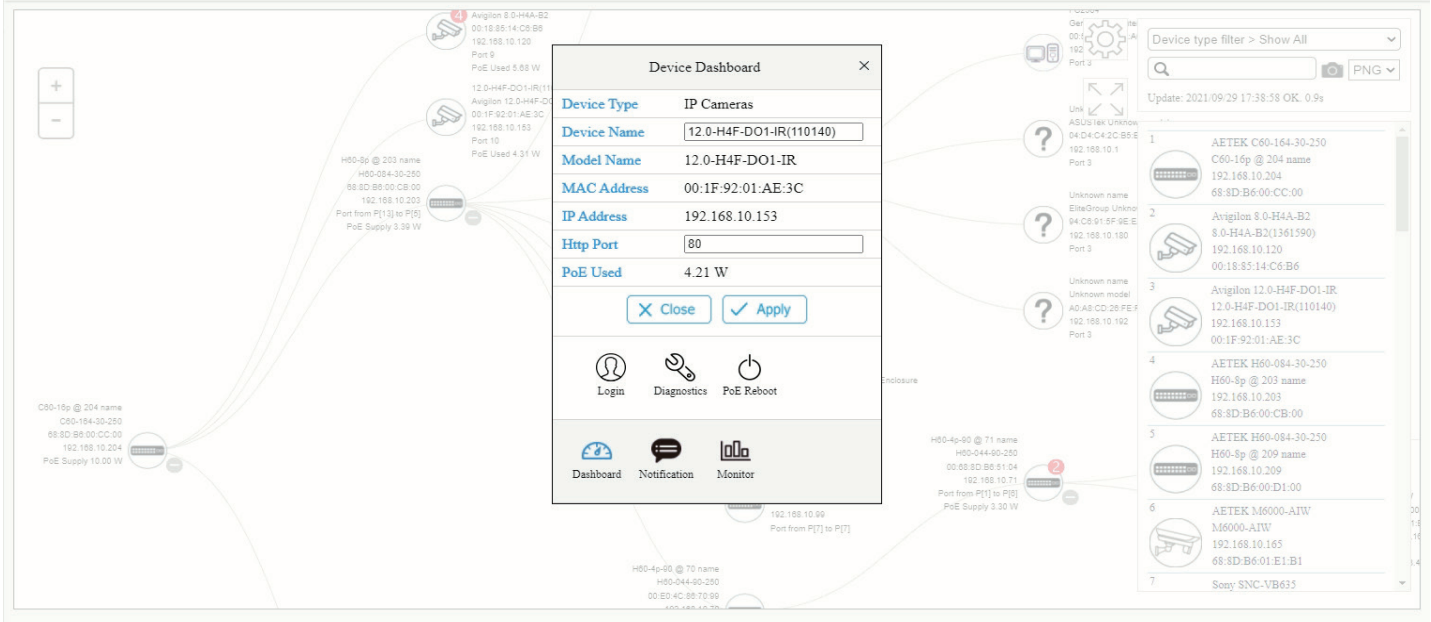
Showing 1 to 10 of 29 entries Previous 1 2 3 Next

Edit

Topology View

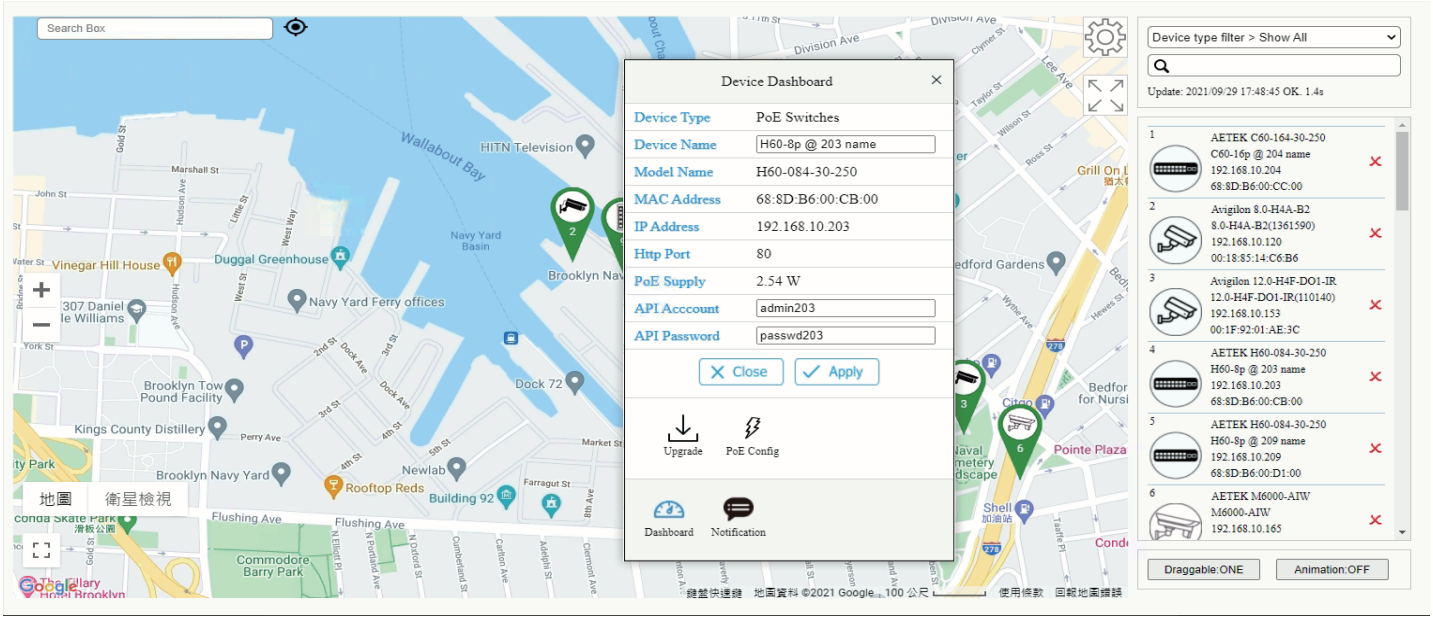


Device Dashboard

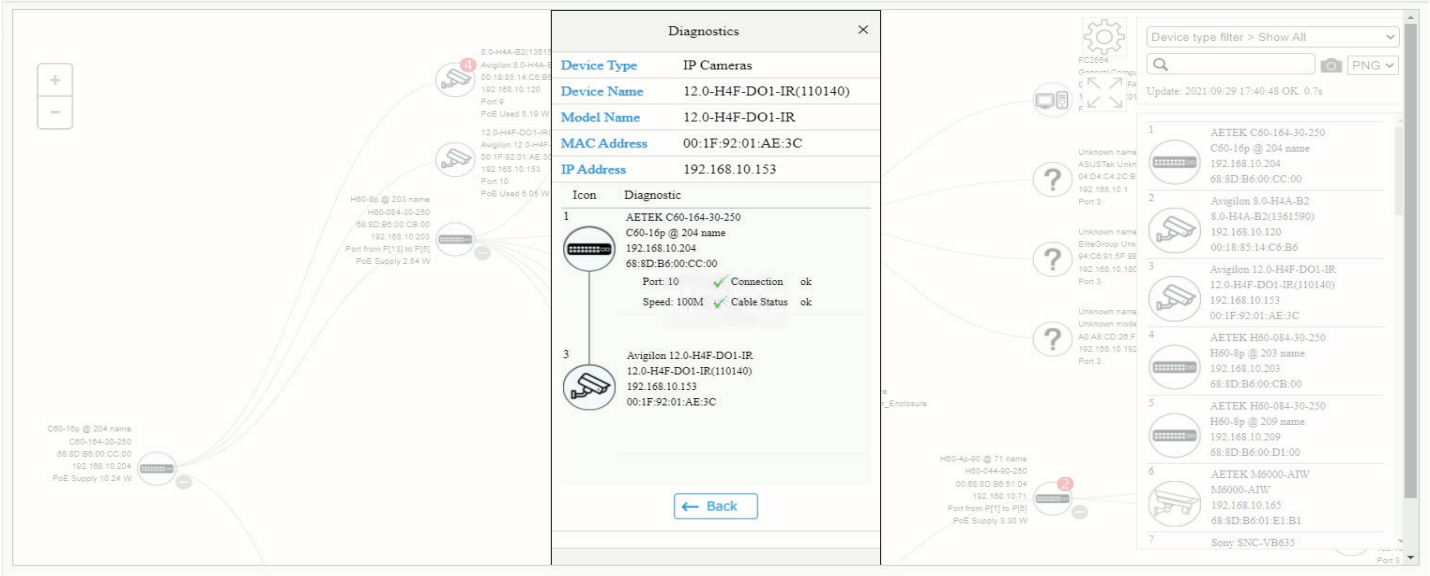


Floor Map View

Google Map View



Cable Diagnostics



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
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
IEEE 802.1ab (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network
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
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-DC-V2	D60-084-30-DC-V2	D60-044-90-DC	D60-044-91-DC
Software function: NTS(Monitoring and management of surveillance)				
NTS Edge	support	support	support	support
NTS Server	support	support	support	support
Networking				
Total Gigabit Ethernet Ports	8	12	8	8
Gigabit Ethernet 802.3af/at PoE Ports	4	8	--	--
Gigabit Ethernet 802.3af/at/bt PoE Ports	--	--	4	4
Gigabit Ethernet RJ45 Ports	2	--	2	2
Gigabit Ethernet SFP Ports (100M/1G)	2	4	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 Power	Dual 12-56V DC	Dual 12-56V DC	Dual 12-56V DC	Dual 12-56V DC
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(-)
Standby Power Consumption	12V DC: 5.52W 24V DC: 6.24W 48V DC: 6.24W	12V DC: 5.52W 24V DC: 6.24W 48V DC: 6.24W	12V DC: 5.28W 24V DC: 5.76W 48V DC: 5.28W	12V DC: 5.28W 24V DC: 5.76W 48V DC: 5.28W
Total Output Power Budget	12V DC: 90W 24V DC: 120W 48V DC: 120W	12V DC: 90W 24V DC: 160W 48V DC: 240W	12V DC: 90W 24V DC: 160W 48V DC: 360W	12V DC: 90W 24V DC: 160W 48V DC: 360W
ESD	Contact ±6 KV, Air ±8 KV	Contact ±6 KV, Air ±8 KV	Contact ±6 KV, Air ±8 KV	Contact ±6 KV, Air ±8 KV
Surge Protection per PoE Port	Online Common mode : ±6 KV	Online Common mode : ±6 KV	Online Common mode : ±6 KV	Online Common mode : ±6 KV
Surge Protection for DC Power Output	Differential mode : ±1 KV	Differential mode : ±1 KV	Differential mode : ±1 KV	Differential mode : ±1 KV
Surge Protection for DC Power Input	Differential mode : ±1 KV	Differential mode : ± 1 KV	Differential mode : ±1 KV	Differential mode : ±1 KV
Surge Protection for DI/DO Port	Differential mode : ±1 KV	Differential mode : ±1 KV	Differential mode : ±1 KV	Differential mode : ±1 KV
Mechanical				
Dimensions (W x D x H)	72 x 122 x 150 mm (2.8 x 4.8 x 5.9 in)	72 x 122 x 150 mm (2.8 x 4.8 x 5.9 in)	72 x 122 x 150 mm (2.8 x 4.8 x 5.9 in)	72 x 122 x 150 mm (2.8 x 4.8 x 5.9 in)
Weight	0.785 kg (1.73 lb)	1.05 kg (2.31 lb)	0.86 kg (1.9 lb)	0.86 kg (1.9 lb)
DI	Dry Contact: Logic level 1: Close to GND Logic level 0: Open	Dry Contact: Logic level 1: Close to GND Logic level 0: Open	Wet Contact: Logic level 1 : 5~12 Volts (10mA) Logic level 0 : 0~1 Volts	Wet Contact: Logic level 1 : 5~12 Volts (10mA) Logic level 0 : 0~1 Volts
DO	24V DC/1A (Max)	24V DC/1A (Max)	24V DC/1A (Max)	24V DC/1A (Max)
Console	RJ45	RJ45	RJ45	RJ45
Cooling Fan	Fanless	Fanless	Fanless	Fanless
Environmental limits				
IP Rating / IK 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
Regulatory/ Approvals				
EMC	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick	CE, FCC, VCCI, C-Tick
Surge	EN61000-4-5	EN61000-4-5	EN61000-4-5	EN61000-4-5
MTBF	>50000 hours	>50000 hours	>50000 hours	>50000 hours
Optional Accessories				
Industrial Power Supply	DRL-48V120W1EN : 48V/120W / DRL-48V240W1EN : 48V/240W / DRL-48V480W1EN : 48V/480W			
SFP Module	SFP Module Model Table			
Junction Box	JB-200			

Ordering Information

PoE Switches			
	**D60-044-30-DC-V2** • 4xGbE PoE (30W) + 2xGbE SFP + 2xGbE RJ45 • 12~56V DC Input		**D60-084-30-DC-V2** • 8xGbE PoE (30W) + 4xGbE SFP • 12~56V DC Input
	**D60-044-90-DC** • 4xGbE bt / PoH PoE (90W) + 2xGbE SFP + 2xGbE RJ45 • 12~56V DC Input		**D60-044-91-DC** • 4xGbE bt PoE (90W) + 2xGbE SFP + 2xGbE RJ45 • 12~56V DC Input

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 / Jounction Box

Pole Mount		Corner Mount	Jounction 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

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