COMMANDO Scout E1100 Series Unmanaged AI Switches

Data Sheet

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Product Overview

COMMANDO Scout E1100 Series Unmanaged AI Switches are ideal for small to large-sized businesses, Internet cafes, hotels, schools, and suitable for surveillance. They are easy to install and maintain and provide rich services, helping customers build secure, reliable, and high-performance networks with various AI functions modes like VLAN , Extend , QoS & PoE with Link pass though function which prevents data loss in case of link failure. It is an economical way to take advantage of high performance fiber/copper 10G/1G or 10GE/1GE ports which helps it to meet the requirement of High end campus LAN, Metro/Enterprise networks. Each switch is capable to deliver 15.4W PoE, 30W PoE+ power on all ports as well as PoE/PoE+ with power budget up to 600W capability while reducing energy consumption and minimizing noise. This Series switches are available in PoE as well as non PoE with 8, 24 & 48 Gigabit Ethernet ports with fixed 10GE or 1GE copper/ 10G or 1G Fiber Uplinks having enclosure type desktop, rack/wall mountable-1U depending on switch model. Designed for operational simplicity to lower total cost of ownership, they enable scalable access layer office and home operations.

It can be quickly set up with plug and play with Zero Touch Provisioning. This Unmanaged AI Switches empower your growing business instant flexibility with copper as well as fiber ports connectivity along with PoE/PoE+ reliable performance at a very affordable cost. This switch provides high-speed network connectivity, auto-negotiation for optimal speed detection through RJ45 Category 5, 5e or 6 cables and supports up to 250m cable distance.

It can identify and determine the correct transmission speed and half/full duplex mode of the attached devices. It also supports standard Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables, Store-and-Forward forwarding scheme to ensure low latency and high data integrity.

It supports Energy Efficient Ethernet (EEE), which enables the switch to enter a power-saving mode when traffic is light. Switches can smartly automatically adjust the PoE/PoE+ power output for transmissions based on the cable length for PoE/PoE+ devices connected. It can also set any ports that are not transmitting traffic to sleep mode.

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Product Highlights

- Supports AI VLAN Mode where Ports 1 to 8 are isolated from each other. It can effectively suppress network storms and improve network performance.
- Supports AI Extend Mode designed for monitoring application scenarios, 1-8 supports 250M distance PoE power supply.
- Supports AI QoS Mode which allows video data can be processed preferentially in the network. Ensure the video data is not stuck, smoother and without delay.
- Supports AI PoE Mode with 24 hours automatic detection of POE device port working condition. An abnormal device is automatically restarted.
- 8 to 48 x 10/100/1000Mbps Ethernet Ports PoE or Non PoE models along with fixed 10G or 1G fiber/ 10GE or 1GE copper Uplinks
- Support fixed uplinks having capacity 10G/1G or 10GE/1GE ports to meet requirement in surveillance and IOT networks which cover up to 80Km with fiber connectivity of SFP+/SFP of 10G/1G modules and also supports 10GE/1GE copper modules.
- Power over Ethernet (PoE) / Power over Ethernet plus (PoE+) models to provide power on all ports to IEEE 802.3af and IEEE 802.3at (15.4W, 30W) capable devices including Wireless AP, Bridges, IoT etc. according to the power budget Up to 600W along with backward compatibility.
- All ports have PoE/PoE+ capability and 30W Max Per port.
- PD detection will automatically detect and provide required power for your PoE/PoE+ devices.
- Support Fanless or Up to 3 temperature-controlled FAN speed adjustment technology with maintenance redundancy and help to build a green and energy saving switches.
- Automatically adjust the PoE/PoE+ power for connected PoE devices based on the cable length and supports up to 250m of cable length.
- Backplane Bandwidth: 60Gbps to 216Gbps

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- MAC address Table: 8000 to 16000 entries
- MAC Address Auto-Learning and Auto-Aging
- Easy Installation, Plug-and-play installation with no configuration required
- Support Store-and-forward Switching
- Enclosure Type Desktop, Rack/Wall mountable - 1U.
- Surge protection ±4 kV
- All ports support jumbo frame of size 10000 bytes transmission.
- All 8 to 48 ports support auto-negotiation and auto MDI/MDIX.
- All ports capable of Gigabit Ethernet connections and provide full speed of data transferring with (Auto-Negotiation/Auto MDI/MDIX) model based.
- Plug and Play design simplifies installation with self-adaption.
- Desktop as well standard rack mountable option along with up to 3 fans or fan-less option, silent design with Small form-factor. Perfect for noise sensitive environments.
- Energy-Saving by Energy Efficient Ethernet (EEE), which enables the switch to enter a power-saving mode when traffic is light.
- With Zero Touch Provisioning: Plug and play and no setup.
- Affordable, Easy-to-Use Switches for Small Business Networks, with Zero Configuration Required
- Comes with one-year default warranty – optionally extendable up to 3 years.

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Features and Benefits

AI VLAN Mode

AI VLAN is essentially port isolation on each of PoE ports. All PoE ports are only able to communicate with the uplink when enabled. This can be useful when scenario requires multiple clients to connect to a common L2 network but should not be able to connect to each other which ultimately improves security. The AI VLAN mode used in surveillance and CCTV applications and not like the VLANs of common manageable switches that support VLAN tagging. When this mode is activated, then enable port cannot access the cameras or devices connected to the rest of the ports, thus increasing its privacy and avoiding brute force attacks for its access. It is not designed to size or compartmentalize networks like the VLANs of a conventional switch, nor does it allow you to change the VLAN they use to work with other existing VLANs on the network into which they may be incorporated. VLAN mode enable ports are isolated from each other. It can effectively suppress network storms and improve network performance.

AI QoS Mode

Most unmanaged switches do not use or can change QoS. The traffic passes unaltered. This Switch ensure certain applications and data flows are prioritized with built-in Quality of Service (QoS) features to ensure certain applications traffic to be prioritized. When AI QoS is enabled on the 8 port models, all ports will prioritize video and VoIP traffic flows over others. If this mode is enabled on 24 and 48 port models, only ports 1-8 will be prioritized and all others will get a lower priority. The voice, video and data can be processed preferentially in the network to ensure the video data is not stuck, and visibility is smoother with no delay.

AI PoE Mode

If a port is not passing traffic for a certain amount of time, the switch will reboot on that specific port in 2 minutes. This is an automated process which can save lots of time on troubleshooting. 24 hours automatic detection of POE device port working condition. An abnormal device is automatically restarted.

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AI Extend Mode

State of art quality switches that can serve real time high-speed performance which covers longer physical distance up to 250 meters with copper pairs compared to other brands switches. AI Extend Mode is ideal for surveillance system, as generally IP cameras require up to 10Mbps speed to work. With AI Extend Mode enabled, it allows you more flexibility to place surveillance devices up to 250m from switch, making it easier and more cost effective to cover a large copper cable area and perfectly suitable for Surveillance purpose. The downside is that port speeds will be limited to only 10Mbps. This feature is suitable for situations for situations where PD is away more than 100m and up to 250m distance.

LFP (Link Fault Pass-through) function

It is built-in monitoring feature for easily tracing the network link failure. LFP function can enhance the integrity and conformity of the Fiber linking to improve the maintainability of the network.

10G Uplinks

10G copper/fiber Uplink supports high speed networking requirement and reduces copper cabling investment and improves network backbone. It supports high-speed access to the network backbone or data center environment. This provides great resiliency, relieves congestion associated with bandwidth-intensive applications, and guarantees smooth hassle-free data transmission.

Compact Design with Flexibility of additional ports

The switches provide additional deployment flexibility, fiber connectivity for easy expansion of your networks up to 80Km with fiber connectivity. So, you can directly connect to a high-performance storage server or deploy a long-distance uplink to another switch.

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Easy to Use

COMMANDO Scout E1100 Series Switches are easy to use and manage. All switches are Plug-and-Play devices that requires zero configuration, so setup is simple and hassle-free. Auto MDI/MDI-X crossover on all ports eliminate the need for crossover cables or uplink ports. Auto-Negotiation on each port senses the link speed of a network device (either 10, 100 or 1000) and smartly adjusts for compatibility and optimal performance. Its compact size makes it ideal for desktops as well as rackmount with limited space. Dynamic LED lights provide real-time work status display and basic fault diagnosis.

PoE/PoE+ Capabilities

Scout E1100 Series Unmanaged AI Switches are high power switches and support up to 600W (PoE/PoE+) Power Budget. This Series switches smartly adjust IEEE802.3af / IEEE802.3at PoE/PoE+ (up to 30 Watts per port). All ports in PoE/PoE+ capable switch allows Power-over-Ethernet (PoE /PoE+) to connect and power PoE/PoE+ capable cameras, Wireless access points, VoIP phones, IoT and all PoE/PoE+ capable devices using just Ethernet cabling.

Auto MDIX Capabilities

Auto sensing/Auto PoE/PoE+ 10/100/1000 ports with auto MDIX capabilities which also removes speed and duplex mismatches automatically as well as covers larger physical distance with copper pairs compared to other brands best switches.

Compact and Silent Performance

It comes with one or 3 fans or fan-less models with Small form-factor, compact PoE/PoE+ switch operates quietly, making it ideal for use in virtually any room or office. Perfect for noise sensitive environments. Fan based Switches have Temperature and load based fan speed control combines accurate monitoring with minimized system acoustic noise. The Fan based switches also feature built-in smart fans that monitor and detect temperature changes, adjusting the fan speed for maximum efficiency. At lower temperatures, the fans run at a lower speed, reducing both the power consumption and noise output of the switch.

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Compact design with flexibility of additional ports

It Provides additional deployment flexibility, fiber connectivity with separate extra flexible ports or combo ports options for easy expansion of your networks. So, you can directly connect to a high-performance storage server or deploy a long-distance uplink to another switch.

Support uninterrupted critical network infrastructure

It has AC input power which protect from power surges through their inline power supply automatically and have in build Surge protection of ±4KV. With this feature protect on cost and the impact to your business by losing these network devices and thus the users/servers connected to them.

Auto MDIX Capabilities

Auto sensing/Auto PoE/PoE+ 10/100/1000 ports with auto MDIX capabilities which also removes speed and duplex mismatches automatically as well as covers larger physical distance with copper pairs compared to other brands best switches.

Cost Efficient

State of art quality product that can serve on real time high-speed Performance with AC input power which covers larger physical distance with copper pairs compared to other brands best switches and are highly reliable, conformance to international open standards, durable, serviceable, aesthetics, perceived quality, enhanced performance with larger range with copper cables up to 250m and usability leads to value to money.

Green Technology

It features the energy-efficient Ethernet that can save power. It automatically adjusts power consumption according to the link status to limit the carbon footprint of your network. It also complies with RoHS, prohibiting the use of certain hazardous materials. Besides that most of the packaging material can be recycled and reused.

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Hardware

COMMANDO Scout E1100 Series Unmanaged AI Switches supports IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10GEBASE-T, IEEE 802.3ak 10GBASE-X, IEEE 802.3x Flow Control, IEEE 802.3af/at. Supported Auto-MDIX function automatically identify straight forward cable and cross-over cable. Support port auto-negotiation function (Automatically negotiate transmission rate and Duplex modes). Support the Energy Efficient Ethernet (IEEE 802.3az) standard, which reduces energy consumption by monitoring the amount of traffic on an active link and putting the link into a sleep state during quiet periods.

Solid performance with non-blocking architecture

- CPU Dual Core having frequency 500 MHz along with packet Buffer memory of 1.5 MB.
- All ports capable of Gigabit Ethernet speed. Full speed of data transferring with (Auto-Negotiation/Auto MDI/MDIX).
- Solid performance with non-blocking architecture, 8000 to 16000 entries MAC Address Table with 4-way hashing algorithm.
- Supports Jumbo frames having maximum packet length up to 10000 bytes.
- 2-hash algorithm selection for L2 table searching/learning with Aging timer range from 0.2s to 1600000s.
- Switching Capacity: up to 216 Gbps
- Forwarding Capacity: Up to 160.68Mpps
- Store-and-forward Switching Scheme.

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Physical Ports and Networking Interfaces

- Up to 48 10/100/1000 Mbps Rj45 Ethernet Ports or SFP/SFP+ ports models with 10G or 1G Fiber/ 10GE or 1GE Copper Uplinks.
- LED Indicators: Power, Link/Act, PoE Max.

IEEE 802.3af/at Compliant Power over Ethernet

- Various PoE power budget options like 150W, 450W and 600W with 30W Max Per port (PoE/PoE+). POE power supply transmission is more reliable due to design of robust network transformer which uses high current. All PoE/PoE+ ports are IEEE 802.3af-compliant PoE, IEEE802.3at-compliant PoE+. Each port delivers 15.4 W PoE, 30 W PoE+ power. PD detection will automatically detect and provide required power for your PoE/PoE+ devices.

Extra Long operational life

- High Quality PCB Circuit Board and PCB Surface Treatment Using Gold Sinking Process.
- Support temperature range 0° C to 55° C
- Surge protection up to ±4KV to designed to automatically protect Switches from surge events by limiting transient voltages and diverting surge currents.
- Long life electrolytic capacitance to increase the operational life of switches. RJ45 Gold plated with 3U thickness.
- Rack and Wall mount design that enables to mounts in an EIA Standard 19-inch telco rack or equipment cabinet along with Rack-mounting kit available with device. Which enables horizontal surface mounting, wall mounting and also having durable robust metal body.

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Green Energy and Noise-free Operation

- Comply with IEEE 802.3az (Energy-Efficient Ethernet) standard, reduces power consumption up to 58% and reduce the noise pollution. Energy Efficient Ethernet (EEE) on the RJ-45 ports and low-power operations for industry best-in-class power management and power consumption capabilities. The ports support reduced power modes so that ports not in use can move into a lower power utilization state.
- Automatic Temperature Controlled Fans using Temperature Sensor. Small form-factor, fan-less as well fan design for silent operation. Perfect for noise sensitive environments.
- Temperature Control Fan to optimize cooling and noise with bilateral heat dissipation.

Ethernet Protocols

Supports wide range of IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10GEBASE-T, IEEE 802.3ak 10GBASE-X, IEEE 802.3x Flow Control, 802.1p priority, Energy Efficient Ethernet, IEEE802.3af, Power over Ethernet, IEEE802.3at, Power over Ethernet plus.

Enterprise High reliability design and high quality product

- Very high Quality as for all Mean Time Before Failure of system, MTBF >2,00,000 hours
- Stability: 64-bit packet, time delay < 10us, packet loss rate: 0
- Restorability of Network shaking or device breakdown, restart(recovery) time < 60sec.
- RoHS Compliant with most of the packaging material can be recycled and reused.

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Specifications

COMMANDO Scout E1100 Series Smart Switches supports IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10GEBASE-T, IEEE 802.3ak 10GBASE-X, IEEE 802.3x Flow Control, IEEE 802.3af/at. Supported Auto-MDIX function automatically identifies straight forward cable and cross-over cable. Support port auto-negotiation function (Automatically negotiate transmission rate and Duplex modes). Support the Energy Efficient Ethernet (IEEE 802.3az) standard, which reduces energy consumption by monitoring the amount of traffic on an active link and putting the link into a sleep state during quiet periods.

It supports 8K-16K entries in the 4-way hash L2 table for MAC address learning and searching also has two hash algorithms for IVL (Independent VLAN Learning), SVL (Shared VLAN Learning), and IVL/SVL (both Independent and Shared VLAN Learning) for flexible network topology architecture. It also has per-port L2 storm filtering control mechanism which suppresses the flow rate of some specific packets for Unknown Unicast Storm, Unicast Storm, Unknown Multicast Storm, Multicast Storm, and Broadcast Storm. IEEE 802.3az Energy Efficient Ethernet (EEE) for 100Base-TX in full duplex operation and supports 10Base-T for 10Base-T in full/half duplex. The Energy Efficient Ethernet (EEE) operational mode combines the IEEE 802.3 Media Access Control (MAC) Sub-layer with a family of Physical Layers defined to support operation in Low Power Idle (LPI) Mode. When Low Power Idle Mode is enabled, systems on both sides of the link can disable portions of the functionality and save power during periods of low link utilization. EEE operational mode supports IEEE 802.3 MAC operation at 1000Mbps. For 100Mbps operation, the 100Base-TX PHY is supported interoperable with legacy 10Base-T PHYs over 100m of Class-D (Category 5) or better cabling. It supports IEEE 802.3x full duplex flow control. If one port's received frame buffer is over the pause threshold, a pause-on frame is sent to indicate to the link partner to stop the transmission. When the port's received frame buffer drops below the pause threshold, it sends a pause-off frame. Auto MDI/MDI-X adjusts automatically for straight-through or crossover cables on all 10/100/1000 ports. Loop protection, If the switch detects a loop, it disables the source port from forwarding data packets originating from the

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switch to avoid broadcast storms. SFP/SFP+ fiber uplinks provide greater distance up to 80Km connectivity using 10G fiber uplinks. The switch provides an estimated cumulative energy savings due to green Ethernet features being auto enabled along with power budget up to 600W.

Table 1. Technical Specifications

E1100 Switch Parameter	Specification
Flash (KB)	16Kbytes
Packet Buffer Memory	Up to 1.5 MB
Switching Method	Store and Forward
Switching Capacity	60Gbps to 216Gbps
MAC Address Table Size	8000 to 16000 entries depending on Model
Maximum packet length	10000byte
Operation Temperature	0° to 55°C
Storage Temperature	-20° to 70°C
Operation Humidity (relative, noncondensing)	10% to 90%
Storage humidity (relative, noncondensing)	5% to 90%
Input Power Supply	AC input power AC: 100~240V 50/60Hz or AC: 180~240V 50/60Hz Depending on models
LED Indicator	Link/Act，PoE, PoE MAX，Power

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Energy Saving	Comply with “EEE” Energy Efficient Ethernet (IEEE 802.3az)
Surge protection (kV)	±4 kV
Rack-mountable	Desktop, Rack/Wall mountable depending on model
Fan (Number)	Fan-less or Up to 3 Fan depending on model

COMMANDO Scout E1100 Series Unmanaged AI Switches hardware supports L2 VLAN function with IVL, SVL, and IVL/SVL with 2-hash algorithm selection for L2 table searching/learning along with Aging timer range from 0.2s to 1600000s. IEEE 802.1Q VLAN with 4K-entry VLAN Table with limited learned L2 MAC entry on each port and each VLAN. Supports up to 16 spanning tree instances for MSTP (IEEE 802.1s), RSTP, and STP. It has 8K-16K entries in the 4-way hash L2 table for MAC address learning and searching also has two hash algorithms for IVL (Independent VLAN Learning), SVL (Shared VLAN Learning), and IVL/SVL (both Independent and Shared VLAN Learning) for flexible network topology architecture. Independent 512-entry L2/IP Multicast table for multicast function. Supports Reserved Multicast Addresses processing.

It also has per-port L2 storm filtering control mechanism which suppresses the flow rate of some specific packets for Unknown Unicast Storm, Unicast Storm, Unknown Multicast Storm, Multicast Storm, and Broadcast Storm. IEEE 802.3az Energy Efficient Ethernet (EEE) for 100Base-TX in full duplex operation and supports 10Base-Te for 10Base-T in full/half duplex. The Energy Efficient Ethernet (EEE) operational mode combines the IEEE 802.3 Media Access Control (MAC) Sub-layer with a family of Physical Layers defined to support operation in Low Power Idle (LPI) Mode. When Low Power Idle Mode is enabled, systems on both sides of the link can disable portions of the functionality and save power during periods of low link utilization. EEE operational mode supports IEEE 802.3 MAC operation at 100Mbps. For 100Mbps operation, the 100Base-TX PHY is supported interoperable with legacy 10Base-T PHYs over 100m of Class-D (Category 5) or better cabling.

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It Supports broadcast, multicast, unknown- multicast, and unknown-unicast packet suppression control, IEEE 802.1x, IEEE 802.3az Energy Efficient Ethernet (EEE), IEEE 802.3x full duplex flow control. If one port's received frame buffer is over the pause threshold, a pause-on frame is sent to indicate to the link partner to stop the transmission. When the port's received frame buffer drops below the pause threshold, it sends a pause-off frame. It has Auto MDI/MDI-X, to adjusts automatically for straight-through or crossover cables on all 10/100/1000 speed ports. Loop protection, If the switch detects a loop, it disables the source port from forwarding data packets originating from the switch to avoid broadcast storms. SFP/SFP+ fiber uplinks provide greater distance connectivity using Gigabit fiber uplinks. The switch provides an estimated cumulative energy savings due to green Ethernet features being auto enabled along with power budget up to 600W.

Table 2. Hardware Specification Enclosure, Fan and Power Budget

PRODUCT CODE	Enclosure Type	FAN	Power Budget (Watts)
E1100-8G+4CX	Desktop	Fanless	24W
E1100-24G+4X	Rack/Wall mountable	Fanless	48W
E1100-48G+4X	Rack/Wall mountable	1	100W
E1100-8GP+4CX	Desktop	Fanless	150W
E1100-24GP+4X	Rack/Wall mountable	1	450W
E1100-48GP+4X	Rack/Wall mountable	3	600W

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Table 3. Hardware Interface Specification

Product Code	Ports	Main Interface	Uplink Interfaces
E1100-8G+4CX	• 8 x 10/100/1000Mbps Ethernet ports • 2 x 10/100/1000Mbps Ethernet + 2 x 10G SFP+ Uplink ports	8GE	2GE and 2SFP+
E1100-24G+4X	• 24 x 10/100/1000Mbps Ethernet ports • 4 x 10G SFP+ Uplink ports	24GE	4SFP+
E1100-48G+4X	• 48 x 10/100/1000Mbps Ethernet ports • 4 x 10G SFP+ Uplink ports	48GE	4SFP+
E1100-8GP+4CX	• 8 x 10/100/1000Mbps Ethernet PoE+ ports • 2 x 10/100/1000Mbps Ethernet + 2 x 10G SFP+ Uplink ports	8GE	2GE and 2SFP+
E1100-24GP+4X	• 24 x 10/100/1000Mbps Ethernet PoE+ ports • 4 x 10G SFP+ Uplink ports	24GE	4SFP+
E1100-48GP+4X	• 48 x 10/100/1000Mbps Ethernet PoE+ ports • 4 x 10G SFP+ Uplink ports	48 GE	4SFP+

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Table 4. Power Specifications

PRODUCT CODE	Max no. of PoE+ (IEEE 802.3at) Ports	Max no. of PoE (IEEE 802.3af) Ports	Power Supply
E1100-8G+4CX	-	-	AC: 100~240V 50/60Hz
E1100-24G+4X	-	-	AC: 100~240V 50/60Hz
E1100-48G+4X	-	-	AC: 100~240V 50/60Hz
E1100-8GP+4CX	4 ports up to 30W	All ports support 15.4W	AC: 100~240V 50/60Hz
E1100-24GP+4X	12 ports up to 30W	All ports support 15.4W	AC: 180~240V 50/60Hz
E1100-48GP+4X	18 ports up to 30W	38 ports up to 15.4W	AC: 180~240V 50/60Hz

The switching capacity indicates the total data exchange capability of the switch, in Gbps. MTBF is a basic measure of a system's reliability. This Series Switch is having higher MTBF, means very reliable product.

Table 5. Bandwidth Specifications

Model Number	Switching Capacity（Gbps）	Switching Capacity Forwarding rate（Mpps）	MTBF (hours)
E1100-8G+4CX	60	44.64	249856
E1100-24G+4X	128	95.22	239856
E1100-48G+4X	216	160.68	217854

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E1100-8GP+4CX	60	44.64	221856
E1100-24GP+4X	128	95.22	209856
E1100-48GP+4X	216	160.68	200854

Table 6. LED Indication

LED Indication	LED Status
Power	**Green OFF:** No power on the switch. **Green ON:** The switch powered on
Link/Act	**LINK/ACT bi-color LED:** **OFF:** Port disconnected or link fail. **Green ON:** 1000Mbps connected. **Amber ON:** 10/100Mbps connected. **Green Flashing:** 1000Mbps connected and Data in transit **Amber Flashing:** 10/100Mbps connected and Data in transit
System	**Green OFF:** The system is starting, please wait **Green ON:** The system is up and running
PoE	**OFF:** PoE/PoE+ power is not provided on port **Blue ON:** PoE/PoE+ power is provided on port
PoE MAX	**PoE MAX OFF:** PoE Power budget is available in switch **Red ON:** PoE Power budget is 95%

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Table 7. Maximum Cable Lengths

Connection Cable Type	Category and Speed	Maximum Cable Distance Supported
Unshielded Twisted Pair cable	10/100Base-TX: UTP category 5/5e/6 cables (Maximum 100m) 1000Base-T: UTP Category 5/5e/6 cable (Maximum 100m)	100M
Shielded Twisted Pair cable	10/100Base-TX: STP category 5/5e/6 cables (Maximum 250m) 1000Base-T: UTP Category 5/5e/6 cable (Maximum 100m)	250M/100M
Optical Fiber Cable	550M~80KM Depending on SFP	80KM

Environmental properties specifications

Environmental properties include those physical properties which relate to the environment. Moisture, heat conductivity, the physical effect of heat, Altitude, Humidity and electrical properties depend on the environmental conditions surrounding the device.

Table 8. Environmental properties

Property	Description
Operation Temperature	0°C to 55°C
Operating temperature and altitudes:	0°C to +55°C, up to 5000 feet (1500m) 0°C to +55°C, up to 10,000 feet (3000m) Minimum ambient temperature for cold start

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	is 32°F (0°C) Short-term* exceptional conditions: 0°C to +55°C, up to 5000 feet (1500m) 0°C to +50°C, up to 10,000 feet (3000m) 0°C to +55°C, at sea level with single fan failure Not more than following in one-year period: 96 consecutive hours, or 360 hours total, or 15 days
Storage Temperature	-20° to 70°C
Operating Humidity (relative, noncondensing)	10% to 90% (Non-condensing)
Storage Humidity	5% to 90%(Non-condensing)

Weight and Dimension specifications

It offers best in class from package dimensions to weight, destination, value, and shipment type. They are suitable for Industry standard Rack/Wall mounting. Industry Standard Rack/Wall mounted describes a unit of electronic equipment that is housed in a metal framework called an equipment rack. Usually, an equipment rack contains multiple "bays," each designed to hold a unit of equipment of standard dimensions.

Table 9. Weight and Dimension

Product Code	Weight & Dimension		
	Kilograms	Centimeters (H x D x W)	Inches (H x D x W)
E1100-8G+4CX	2.3Kg	4.4 x 29.0 x 20.0	1.7 x 11.4 x 7.9
E1100-24G+4X	4.4Kg	4.4 x 44.4 x 30.0	1.7 x 17.5 x 11.8
E1100-48G+4X	5.3Kg	4.4 x 44.4 x 34.7	1.7 x 17.5 x 13.7

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E1100-8GP+4CX	2.8Kg	4.4 x 29.0 x 20.0	1.7 x 11.4 x 7.9
E1100-24GP+4X	5.2Kg	4.4 x 44.4 x 30.0	1.7 x 17.5 x 11.8
E1100-48GP+4X	6.5Kg	4.4 x 44.4 x 34.7	1.7 x 17.5 x 13.7

SFP/SFP+ ports Slots specifications

It has 1 and 10 Gigabit Ethernet fiber based Gigabit Ethernet Small Form-Factor Pluggable Plus (SFP/SFP+) switches with granular port densities that fit diverse campus needs. The SFP/SFP+ transceiver is a compact, hot-swappable device that plugs into a physical port of a network device. SFP/SFP+ optics are used in communication networks and have a transmitting side (Tx) and a receiving side (Rx). The different SFP/SFP+ transceivers work with different wavelengths at an appointed distance. A 1G to 10G solution with SFP/SFP+ uplinks.

Table 10. SFP/ SFP+ Specifications

PRODUCT CODE	SUPPORTING SFP/SFP+
SFP-SM-1G	COMMANDO LightningFIBER 1000BASE-LX/LH, SFP, 1310nm, 20km, SMF, DDM, Multi-vendor Compatible
SFP-MM-1G	COMMANDO LightningFIBER 1000BASE-SX, SFP, 850nm, 550m, MMF, DDM, Multi-vendor Compatible
SFP-UTP-1G	COMMANDO LightningCOPPER 1000BASE-T Copper RJ-45, SFP, 100m, CAT5/6, Multi-vendor Compatible
SFP-SR-10G	COMMANDO LightningFIBER 10GBASE-SR, SFP+, 850nm, 300m, MMF, DDM, Multi-vendor Compatible
SFP-LR-10G	COMMANDO LightningFIBER 10GBASE-LR, SFP+, 1310nm, 20km,

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	SMF, DDM, Multi-vendor Compatible
SFP-ER-10G	COMMANDO LightningFIBER 10GBASE-ER, SFP+, 1550nm, 40km, SMF, DDM, Multi-vendor Compatible
SFP-ZR-10G	COMMANDO LightningFIBER 10GBASE-ZR/ZW, SFP+, 1550nm, 80km, SMF, DDM, Multi-vendor Compatible
QSFP-UTP-10G	COMMANDO LightningCOPPER 10GBASE-T Copper RJ-45, SFP+, 80m, CAT 6a/7, Multi-vendor Compatible

Power Supply Specifications

Power supply is a king of all electronic devices without the power supply switch cannot work. Following rating power input required to make switch work.

Table 11. Power supply specifications

Power supply rated maximum	240V AC
Input-voltage range and frequency	AC: 100~240V 50/60Hz AC: 180~240V, 50/60 Hz
Power cord rating	15A

Included in the bundle/box

All E1100 Series Unmanaged AI Switches are made available for use globally along with accessories in the bundle to facilitate for enhance operations.

The switch box comes included with the following accessories:

1x COMMANDO Scout E1100 Series Switch
1x Power cable
1x Rack/Wall mountable kit

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Support and Warranty

- Same-day assistance.
- Comprehensive 24-hour support using common communication/chat platforms, Email and Telephone.
- Provide FAQs and troubleshooting help online (self-service) through cloud-based solutions.
- Highly technical and trained representatives to resolve issues.
- One-year default warranty with option of warranty extension up to 3 years

Table 12. Support and Warranty

Warranty and Support	
Products covered	COMMANDO Scout E1100 Series Unmanaged AI Switches
Warranty duration	One Year RTB (Return To Base) replacement warranty – optionally extendable up to 3 years.
Hardware replacement	COMMANDO, its resellers or its service center will use commercially reasonable efforts to replace the product subject to stock availability. Otherwise, a replacement will be arranged within 15 working days after receipt of the Return Materials Authorization (RMA) request.
End-of-life policy	In case of discontinuation of the product, support is limited to 3 years from announcement date.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a COMMANDO reseller, not more than 90 days after original shipment by COMMANDO).
Support duration	Lifetime support.
COMMANDO Care	COMMANDO will provide 24x7 support for basic configuration, diagnosis, and troubleshooting of device-level problems for up to one year from the date of shipment of the originally purchased product. This support does not include solution or network-level support beyond the specific device under consideration.
Online Portal Access	Warranty allows guest access to commandonetworks.com for all available technical queries.

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Ordering Information

Table 13 lists ordering information for the COMMANDO Scout E1100 Series Unmanaged AI Switches. To place an order, please contact your local reseller/distributor or COMMANDO Sales Representative at www.commandonetworks.com/rfq

Table 13. COMMANDO Scout E1100 Series Unmanaged AI Switches Ordering Information

Ordering Information	
Product Code	Description
E1100-8G+4CX	COMMANDO Scout E1100 8GE, 2x1GE + 2x10G SFP+ Uplinks, Unmanaged AI Switch
E1100-24G+4X	COMMANDO Scout E1100 24GE, 4x10G SFP+ Uplinks, Unmanaged AI Switch
E1100-48G+4X	COMMANDO Scout E1100 48GE, 4x10G SFP+ Uplinks, Unmanaged AI Switch
E1100-8GP+4CX	COMMANDO Scout E1100 8GE PoE+, 2x1GE + 2x10G SFP+ Uplinks, 150W, Unmanaged AI Switch
E1100-24GP+4X	COMMANDO Scout E1100 24GE PoE+, 4x10G SFP+ Uplinks, 450W, Unmanaged AI Switch
E1100-48GP+4X	COMMANDO AI Switch

Document History

Release	What's new	Date
Release 1	New Launch	September 18, 2023