

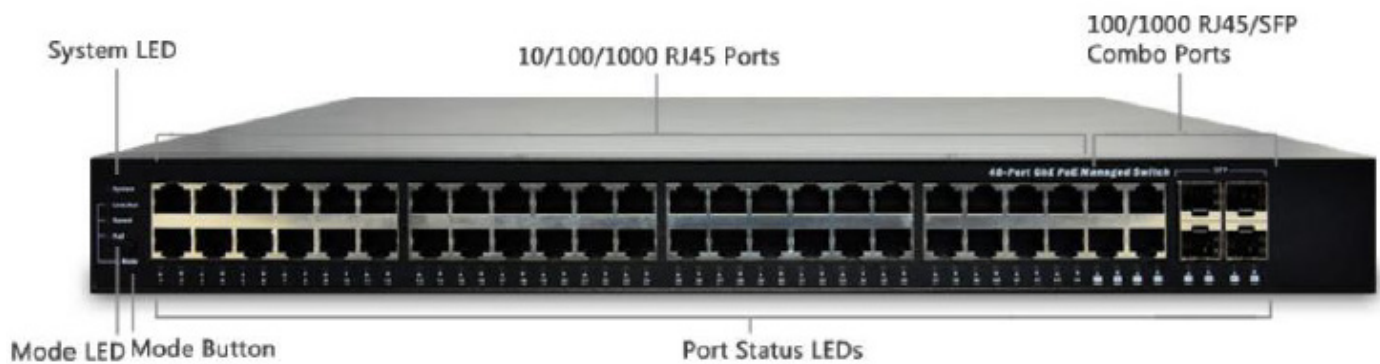
Data Sheet:

Arial U™ 48 Port Switch

Product Description

The Arial U™ 48 Port Switch is a next-generation Ethernet Switch offering a full suite of L2 features, better PoE functionality and usability, including advanced L3 features such as Static Route that delivers better cost performance and lower total cost of ownership in Enterprise networks via fiber or copper connections.

The switch delivers 44 (10M/100M/1G) RJ45/PoE+ (Support 802.3at/af, and total up to 370W) ports, 4 Combo GbE RJ45/SFP ports and DB9 Console port. The 48 port switch provides high HW performance and environment flexibility for SMBs and Enterprises.



Key Features

- L2+ Managed features provide easier manageability, robust security and QoS.
- DHCP Server
- IPv4/IPv6 L3 static route
- PoE Port configuration and scheduling
- 802.3at high power PoE plus standard
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet
- UL60950 certified

Listed to UL1069
File number: E496257
Type: HN



Benefits

- **Feature-rich Ethernet Switch for Enterprise-class**
The switch delivers advanced functionality in L2+ managed switch including Layer 3 static route, DHCP server, IPv6 support, LLDP, etc. It also has comprehensive security features such as IP source guard and ACL to guard your network from unauthorized access.
It helps users to build on the market-leading price/performance with L2+ Managed GbE PoE switch, and provide secure, reliable and ease of use for enterprise/SMB deployments.
- **Lower Total Cost of Ownership (TCO) with Energy-efficient Design**
It is designed to help customers to reduce power consumption and lower the TCO by Energy Efficient Ethernet (IEEE 802.3az) features. It can be used for customers to build a green Ethernet networking environment.
- **Advanced Power over Ethernet Management**
The model includes PoE+ options to power IP devices with power-saving features like Power scheduling and PoE configuration.

Data Sheet: Arial U 48 Ports Switch

Specifications	
Model	SKU: 56106 (Advantech EKI-4748G4CP)
Port Configuration	Total Ports: <ul style="list-style-type: none"> • 48 RJ45 (10M/100M/1G): <ul style="list-style-type: none"> • 44 Uplinks (100M/1G): <ul style="list-style-type: none"> • 4 RJ45/SFP Combo Console: <ul style="list-style-type: none"> • DB9
Hardware Performance	Forwarding Capacity: <ul style="list-style-type: none"> • 71.42 Mpps Switching Capacity: <ul style="list-style-type: none"> • 96 Gbps Mac Table: <ul style="list-style-type: none"> • 32 K Jumbo Frames: <ul style="list-style-type: none"> • 10056 Bytes
Environmental Range	Operating Temperature: <ul style="list-style-type: none"> • Fahrenheit: 32 to 113 • Centigrade: 0 to 45 Storage Temperature: <ul style="list-style-type: none"> • Fahrenheit: -4 to 158 • Centigrade: -20 to 70 Altitude: <ul style="list-style-type: none"> • Feet: < 10000. • Meters: < 3000
Dimension, Weights, Humidity	Dimension (WxHxD): <ul style="list-style-type: none"> • Millimeter: 442 x 44 x 385 • Inches: 17.4 x 1.73 x 15.2 Weight: <ul style="list-style-type: none"> • Kilograms: 5.8 • Pounds: 12.8 Operating Humidity: <ul style="list-style-type: none"> • 10% to 90% non-condensing
Voltage and Frequency	AC Input Voltage and Frequency: <ul style="list-style-type: none"> • Voltage: 100-240 VAC • Frequency: 50~60 Hz
PoE Power Capacity	Available PoE Power: <ul style="list-style-type: none"> • 370W Number of Ports That Support PoE(15.4W) and PoE+(30.0W): <ul style="list-style-type: none"> • Each of port 1 - 44 support PoE/ PoE+ within available PoE Power

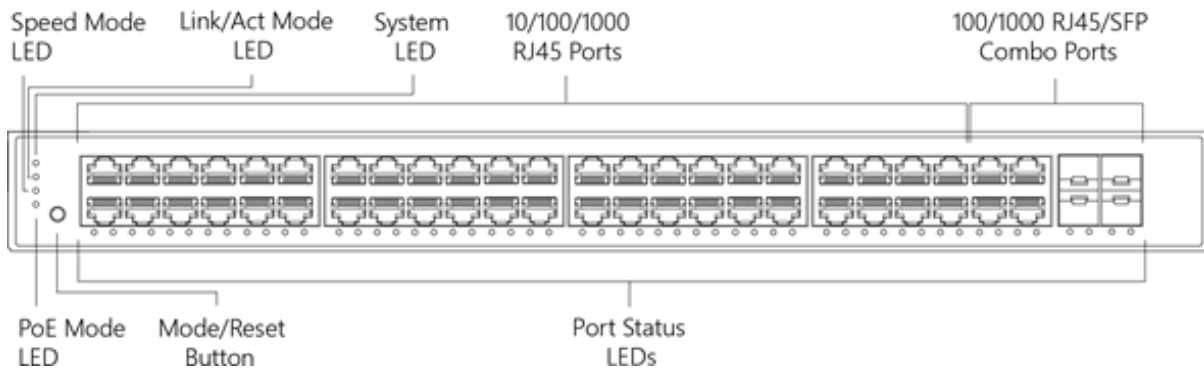
Software Features	
Layer 2 Switching	<p>Spanning Tree Protocol (STP):</p> <ul style="list-style-type: none"> • Standard Spanning Tree 802.1d • Rapid Spanning Tree (RSTP) 802.1w • Multiple Spanning Tree (MSTP) 802.1s <p>Trunking: Link Aggregation Control Protocol (LACP) IEEE 802.3ad</p> <ul style="list-style-type: none"> • Up to 24 groups • Up to 4 ports per group <p>VLAN: Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs)</p> <ul style="list-style-type: none"> • Port-based VLAN • 802.1Q tag-based VLAN • MAC-based VLAN • Management VLAN • Private VLAN Edge (PVE) • Q-in-Q (double tag) VLAN • Voice VLAN • GARP VLAN Registration Protocol (GVRP) <p>DHCP Relay:</p> <ul style="list-style-type: none"> • Relay of DHCP traffic to DHCP server in different VLAN. • Works with DHCP Option 82 <p>IGMP v1/v2/v3 Snooping:</p> <ul style="list-style-type: none"> • IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 1024 multicast groups <p>IGMP Querier</p> <ul style="list-style-type: none"> • IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router <p>IGMP Proxy</p> <ul style="list-style-type: none"> • IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router <p>MLD v1/v2 Snooping</p> <ul style="list-style-type: none"> • Delivers IPv6 multicast packets only to the required receivers
Layer 3 Switching	<p>IPv4 Static Routing</p> <ul style="list-style-type: none"> • IPv4 Unicast: Static routing <p>IPv6 Static Routing</p> <ul style="list-style-type: none"> • IPv6 Unicast: Static routing

<p>Security</p>	<p>Secure Shell (SSH):</p> <ul style="list-style-type: none"> • SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported <p>Secure Sockets Layer (SSL):</p> <ul style="list-style-type: none"> • SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch <p>IEEE 802.1X:</p> <ul style="list-style-type: none"> • 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 <p>Layer 2 Isolation Private VLAN Edge:</p> <ul style="list-style-type: none"> • PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks <p>Port Security:</p> <ul style="list-style-type: none"> • Locks MAC addresses to ports, and limits the number of learned MAC address <p>IP Source Guard:</p> <ul style="list-style-type: none"> • Prevents illegal IP address from accessing to specific port in the switch <p>RADIUS/ TACACS+:</p> <ul style="list-style-type: none"> • Supports RADIUS and TACACS+ authentication. Switch as a client <p>Storm Control:</p> <ul style="list-style-type: none"> • Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port <p>DHCP Snooping:</p> <ul style="list-style-type: none"> • A feature acts as a firewall between untrusted hosts and trusted DHCP servers <p>ACLs:</p> <p>Supports up to 256 entries. Drop or rate limitation based on:</p> <ul style="list-style-type: none"> • Source and destination MAC, VLAN ID or IP address, protocol, port, • Differentiated services code point (DSCP) / IP precedence • TCP/ UDP source and destination ports • 802.1p priority • Ethernet type • Internet Control Message Protocol (ICMP) packets • TCP flag
<p>Quality of Service</p>	<p>Hardware Queue:</p> <ul style="list-style-type: none"> • Supports 8 hardware queues <p>Scheduling:</p> <ul style="list-style-type: none"> • Strict priority and weighted round-robin (WRR): • Queue assignment based on DSCP and class of service <p>Classification:</p> <ul style="list-style-type: none"> • Port based • 802.1p VLAN priority based • IPv4/IPv6 precedence / DSCP based • Differentiated Services (DiffServ) • Classification and re-marking ACLs <p>Rate Limiting:</p> <ul style="list-style-type: none"> • Ingress policer • Egress shaping and rate control • Per port

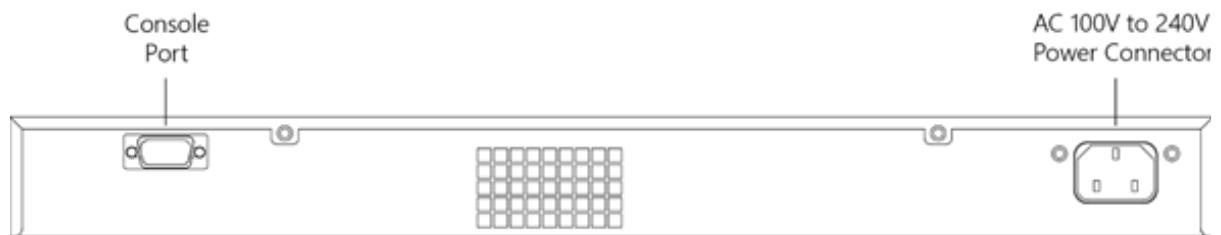
<p>Management</p>	<p>DHCP Server:</p> <ul style="list-style-type: none"> • Support DHCP server to assign IP to DHCP clients <p>Zero Touch Upgrade:</p> <ul style="list-style-type: none"> • Upgrade single switch automatically when you get notification <p>Remote Monitoring (RMON):</p> <ul style="list-style-type: none"> • Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis <p>Port Mirroring:</p> <ul style="list-style-type: none"> • 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. <p>UPnP:</p> <ul style="list-style-type: none"> • The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play <p>s-Flow:</p> <ul style="list-style-type: none"> • The industry 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 <p>IEEE 802.1ab (LLDP):</p> <ul style="list-style-type: none"> • Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network • Support LLDP-MED extensions <p>Web GUI Interface:</p> <ul style="list-style-type: none"> • Built-in switch configuration utility for browser-based device configuration <p>CLI:</p> <ul style="list-style-type: none"> • For users to configure/manage switches in command line modes <p>Dual Image:</p> <ul style="list-style-type: none"> • Independent primary and secondary images for backup while upgrading <p>SNMP:</p> <ul style="list-style-type: none"> • SNMP version 1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM) <p>Firmware Upgrade:</p> <ul style="list-style-type: none"> • Web browser upgrade (HTTP/ HTTPS) and TFTP • Upgrade through console port as well <p>NTP:</p> <ul style="list-style-type: none"> • Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched <p>Other Management:</p> <ul style="list-style-type: none"> • HTTP/HTTPS; SSH • DHCP Client/ DHCPv6 Client • Cable Diagnostics • Ping • Syslog • Telnet Client • IPv6 Management
<p>Power over Ethernet (PoE)</p>	<p>Port Configuration:</p> <ul style="list-style-type: none"> • Supports per port PoE configuration function <p>PoE Scheduling:</p> <ul style="list-style-type: none"> • Supports per port PoE scheduling to turn on/off the PoE devices (PDs). <p>Auto-checking:</p> <ul style="list-style-type: none"> • Check the link status of PDs. Reboot PDs if there is no responses. <p>Power Delay:</p> <ul style="list-style-type: none"> • 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

Data Sheet: Arial U 48 Ports Switch

Front View



Back View



About STANLEY Healthcare

STANLEY Healthcare provides over 5,000 acute care hospitals and 12,000 long-term care organizations with enterprise solutions that create a safe, secure and efficient healthcare experience across life's stages. The STANLEY Healthcare solution set enables customers to achieve organizational excellence and superior care in critical areas: Patient/Resident Safety, Security & Protection, Environmental Monitoring, Clinical Operations & Workflow and Supply Chain & Asset Management. These solutions are complemented by STANLEY Healthcare's By Your Side™ Lifetime Customer Care commitment to ensure that every customer achieves success and realizes the full value of their investment, through consulting, training, implementation and integration services. STANLEY Healthcare is proud to be part of Stanley Black & Decker, Inc. For more information, visit stanleyhealthcare.com. Follow STANLEY Healthcare on [Facebook](#), [Twitter](#), [LinkedIn](#) and [YouTube](#).