

Data Sheet

Product Highlights

Performance

- •7130-16G3S: 16x100M/1GbE/10GbE
- •7130-48G3S: 48x100M/1GbE/10GbE
- •7130-96S: 96x100M/1GbE/10GbE
- Non blocking
- Nanosecond-level L1 forwarding
- Deterministic

Advanced L1 functionality

- Signal regeneration
- Media conversion
- Port mirroring
- Telemetry
- Dynamic patching/link management
- Layer 1+ statistics on every link

Core Features

- SFP+ ports capable of 100M-11.3Gbps
- Full signal recovery & regeneration
- Bit for bit forwarding for any protocol
- Layer 1+ packet statistics

Ultra low latency

- 4 ns deterministic latency (7130-16/48G3S)
- 6 ns deterministic latency (7130-96S)
- Less than 100 ps jitter
- Same latency for 1:N port mirroring
- Completely non-blocking

Redundancy & data center

- 1 or 2 rack unit (RU)
- Dual redundant, hot swappable PSU
- Dual redundant, hot swappable fans
- AC & DC power options
- Rear to front or front to rear cooling

Monitoring

- Packet statistics on every port
- Embedded influxdb database
- Eye diagram for monitoring/ troubleshooting
- tcpdump for diagnostics on every port
- LLDP for discovering network topology
- Full SFP+ interface diagnostics including light levels, temperature & voltage

Management platform

- Linux based
- Industry standard CLI
- JSON RPC API for remote management

Overview

The Arista 7130S Connect Series fixed systems are powerful network devices designed for ultra low latency and offer a wealth of integrated management features and functionalities.

The 7130S Connect Series switches forward data between ports in 4 nanoseconds with full signal recovery and regeneration. They are non-blocking, deterministic with virtually undetectable jitter, and do not buffer or queue data. State of the art signal integrity circuitry allows for flexible use of SFP/SFP+ including long-range multi-mode (LRM) as well as passive and active direct-attach copper cables.

The 7130S Connect Series platform is packet-aware providing comprehensive packet statistics, signal quality monitoring including eye diagrams, and diagnostics. Packet replication provides the ability to sniff packets without affecting the data path.

The Arista's 7130S Connect Series Layer 1+ switches can be used in a network as a remotely configurable patch panel, for one to many data broadcast, ad-hoc tapping, media conversion, and link monitoring with the same overhead as a meter of fiber and no degeneration of signal quality.

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Arista 7130S Connect Series

Feature	Benefits
4 - 6 ns deterministic latency	Rich feature set with latency as low and as deterministic as a meter of fiber
Crosspoint switch	Acts as remotely configurable patch panel, kin- switch and can perform bypass for failed links.
Media conversion	Reduces costs by converting between different media types running at the same rate
Protocol agnostic	Connects any bit-stream including fiber-channel and CPRI with regeneration to improve signal quality
Layer 1+ packet stats	Provides higher-level packet statistics across all ports with layer 1 performance
Signal integrity	Provides full clock and data recovery on both input and output
X86-64 Linux management	Open standards based operating system
Cable compatibility	Compatible with suite of SFP+ modules and direct attach copper cables

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7130S Connect Series | Technical Specifications

Model Comparison	el Comparison 7130-16G3S E		7130-96S E
Ports	16 x SFP+ 1 x RJ45	48 x SFP+ 1 x RJ45	96 x SFP+ 2 x RJ45
Throughput	100M-11.3Gbps	100M-11.3Gbps	100M-11.3Gbps
Latency	4 ns	4 ns	6 ns
CPU	Quad-Core x86	Quad-Core x86	Quad-Core x86
System Memory	8 GB RAM	8 GB RAM	8 GB RAM
On-board SSD	64GB	64GB	64GB
USB Ports	1	1	1
100/1000 Mgmt Ports	2	2	2
RS-232 Serial Ports		1 (RJ-45)	
Hot-swap Power Supplies		2 (1+1 redundant)	
Hot-swappable Fan Trays	2 (1+1 redundant) 3 (N+1 redundan		
Reversible Airflow Option	Yes		
Rack Units	1U	1U	2U
Size (WxHxD)	17.6 x 1.7 x 14.9" (44.8 x 4.3 x 37.9 cm)	17.6 x 1.7 x 14.9" (44.8 x 4.3 x 37.9 cm)	17.6 x 3.3 x 14.9" (44.8 x 8.7 x 37.9 cm)
Max Power Draw	190W	190W	388W
Weight	9kg/20lbs	9kg/20lbs	10kg/22lbs
Fan Tray	FAN-7130-1U	FAN-7130-1U	FAN-7130-2U
Power Supplies	PWR-500 (AC or DC)	PWR-500 (AC or DC)	PWR-747-AC PWR-1900-DC

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7130S Connect Series | Physical Characteristics

Interface Type	SFP+ ports
1000BASE-T	RJ45
1000BASE-LX	Up to 10km
1000BASE-SX	Up to 550m
10GBASE-CR	SFP+ to SFP+: 0.5m-5m
10GBASE-SRL	100m
10GBASE-SR	300m
10GBASE-LRL	1km
10GBASE-LR	10km
10GBASE-ER	40km
10GBASE-DWDM	80km
40GBASE-CR4	QSFP+/SFP+

EMC	FCC Class A, ICES-003, EN 55032, EN IEC 61000-3-2:2019, EN 61000-3-3
Immunity	EN 55035 EN 300 386
Safety	EN 62368-1:2014 + A11:2017 IEC-62368-1:2014
Certifications	BSMI (Taiwan) CE (European Union) KCC (South Korea) NRTL (North America) RCM (Australia/New Zealand) UKCA (United Kingdom) VCCI (Japan)
European Union Directives	2014/53/EU Radio Equipment Directive 2014/35/EU Low Voltage Directive 2014/30/EU EMC Directive 2012/19/EU WEEE Directive 2011/65/EU RoHS Directive 2015/863/EU Commission Delegated Directive
Further Information	Product Certification Portal

Environmental Characteristics

Operating Temperature ¹	0 to 40°C (32 to 104°F)
Relative Humidity	10% to 85% non-condensing
Maximum Altitude	2,000m (6,500ft)

Power Supply Specifications

Power Supply	PWR-500AC	PWR-500DC	PWR-747AC	PWR-1900DC
Input Voltage	100-240V AC	-48 to -60 VDC	100-240V AC	40-72DC
Typical Input Current	6.5 -3.2A	11.8A Max (-48V)	10.0 - 5.0A	44A Max (-48V)
Input Frequency	50/60Hz	DC	50/60Hz	DC
Input Connector	IEC 320-C13	AWG #14 Max	IEC 320-C13	AWG #6 Max
Efficiency (Typical)	93% Platinum	90%	93% Platinum	90%
Compatibility	7130-16G3S	, 7130-48G3S	713	0-96S

Standards Compliance

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7130S Connect Series | Ordering Information

7130S Connect

Product Number	Product Description
DCS-7130-16G3S-F	Arista 7130 Series G3S Connect 16 Layer-1 Switch, Front-to-rear air, 2xAC
DCS-7130-16G3S-R	Arista 7130 Series G3S Connect 16 Layer-1 Switch, Rear-to-front air, 2xAC
DCS-7130-48G3S-F	Arista 7130 Series G3S Connect 48 Layer-1 Switch Front-to-rear air, 2xAC
DCS-7130-48G3S-R	Arista 7130 Series G3S Connect 48 Layer-1 Switch Rear-to-front air, 2xAC
DCS-7130-96S-F	Arista 7130 Series Connect 96 Layer-1 Switch Front-to-rear air, 2xAC
DCS-7130-96S-R	Arista 7130 Series Connect 96 Layer-1 Switch Rear-to-front air, 2xAC

Optional Components and Spares

Product Number	Product Description
FAN-7130-1U-F	Spare fan module for Arista 7130 Series 1U (front-to-rear airflow)
FAN-7130-1U-R	Spare fan module for Arista 7130 Series 1U (rear-to-front airflow)
FAN-7130-2U-F	Spare fan module for Arista 7130 Series 2U (front-to-rear airflow)
FAN-7130-2U-R	Spare fan module for Arista 7130 Series 2U (rear-to-front airflow)
PWR-500AC-F	Spare 500 Watt AC power supply for Arista 7050X, 7280 and 7130S Switches (front-to-rear airflow)
PWR-500AC-R	Spare 500 Watt AC power supply for Arista 7050X, 7280 and 7130S Switches (rear-to-front airflow)
PWR-500-DC-F	Spare 500W DC Power Supply for 7050X, 7280 and 7130S series (front to rear airflow switch)
PWR-500-DC-R	Spare 500W DC Power Supply for 7050X, 7280 and 7130S series (rear to front airflow switch)
PWR-747AC-RED	Spare 750 Watt AC power supply for Arista 7280R and 7130S Switches (front-to-rear airflow)
PWR-747AC-BLUE	Spare 750 Watt AC power supply for Arista 7280R and 7130S Switches (rear-to-front airflow)
PWR-1900-DC-F	Spare 1900W DC power supply for Arista 7130S Series 2U switches (front to rear airflow)
PWR-1900-DC-R	Spare 1900W DC power supply for Arista 7130S Series 2U switches (rear to front airflow)

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