

June 2021

Aruba CX 4100i Switch Series

Customer presentation

aruba

a Hewlett Packard
Enterprise company



AG TECH
TECHNICAL SOLUTIONS

Agenda

01

Introduction

02

Product overview

03

Ordering information

04

Resources

Intelligent edge extends beyond carpeted spaces

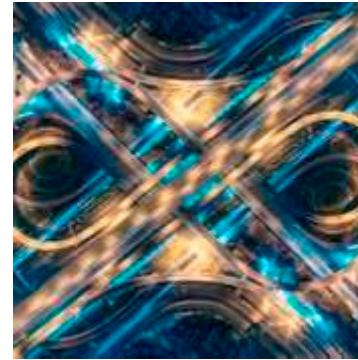
Smart, secure, and reliable connectivity improves productivity and increases safety



Manufacturing



Warehouses



Smart Cities



LPV(Large Public Venue)



Government



Higher-Ed



Agriculture



Transportation



Creating connectivity and IT operational challenges



Connectivity at the Edge

Productivity, automation, and monitoring driving reliance on connectivity extending beyond climate-controlled spaces



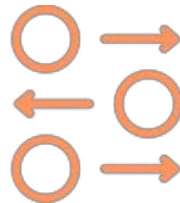
Increased Demand

29 billion connected devices forecasted by 2022, with 18 billion will be related to IoT¹



Security Risks

80% of organizations found IoT devices that they did not install or secure²



Silos of operation

75% of organizations use 4 or more network management tools³



Manual Processes

70% of network configurations is done manually⁴



¹ Ericsson, Internet of Things forecast: <https://www.ericsson.com/en/mobility-report/internet-of-things-forecast>

² Gartner, "Segmentation or Isolation: Implementing Best Practices for Connecting 'All' Devices," September 2019.

³ Network Management Megatrends 2018: Exploring NetSecOps Convergence, Network Automation, and Cloud Networking

⁴ Gartner, "5 Network Cost Optimization Opportunities," June 2019

CX Switches: Automation, Intelligence, and Security

Unified Operations

Automated and intelligent configs and unified mgmt with Central

Faster Troubleshooting

Distributed analytics built-in and alerts for AIOps

Always On

Resilient switch architecture for a highly available network

Secure Access

Automated and unified Dynamic Segmentation for IoT and users



New ruggedized series extends CX innovation to harsh environments

Simplicity from edge access to data center with AOS-CX

Aruba CX 4100i Switch Series

Ruggedized, secure, and smart Ethernet switches

COMING SOON



AC-DC
480W



AC-DC
240W



DC-DC
240W

12 port fan less DIN rail mount
with 2 x 1/10GbE uplinks and 3 PSU choices



24 port fan less rack mount
with 4 x 1/10GbE uplinks and built-in PSU

Ruggedized L2 Ethernet

IoT ready

Operational simplicity

DIN rail mount
Rack mount

Extended temperatures (-40C to 70C¹) and IP30

30W and 60W PoE (360W)
with high-speed uplinks

Unified role-based access
with Dynamic Segmentation

Manage via single pane of
glass with Aruba Central²

Advanced configuration and
programmability with CX

¹Temperature derated to 50C if non-industrial temperature transceivers are used.

²Central support planned for future release.





a Hewlett Packard
Enterprise company

**Market Leader 15
Years Running¹**



Figure 1. Magic Quadrant for Wired and Wireless LAN Access Infrastructure



¹ Aruba's 15 years of placement includes HPE (Aruba) in the Magic Quadrant for the Wired & Wireless LAN Access Infrastructure from 2015-2020 (6 years), Aruba Networks in the same Magic Quadrant from 2012-2014 (3 years) and in the Magic Quadrant for Wireless LAN Access Infrastructure from 2006-2011 (6 years).

Agenda

01

Introduction

02

Product overview

03

Ordering information

04

Resources

Aruba CX 4100i Switch Series

Versatile deployment with ruggedized IP30 Layer 2 access switch series



3 power supplies (external)



Aruba CX 4100i 12G CL4/6 POE 2SFP+ DIN Switch

- 12 ports 10/100/1000 Base-T
- 2 ports 100/1G/10G SFP+ slots
- Fan-less and IP30
- 4 ports of PoE IEEE 802.3bt (60W/port) and 8 ports of 802.3at PoE (30W/port)
- 3 external PSU choices for up to 360W PoE
- DIN mountable (rack mountable with kit)
- 2 EPS input connections
- PoE Power:
 - Normal (-40°C to +50°C): 360W
 - Derated (+50°C to +70°C):~200W

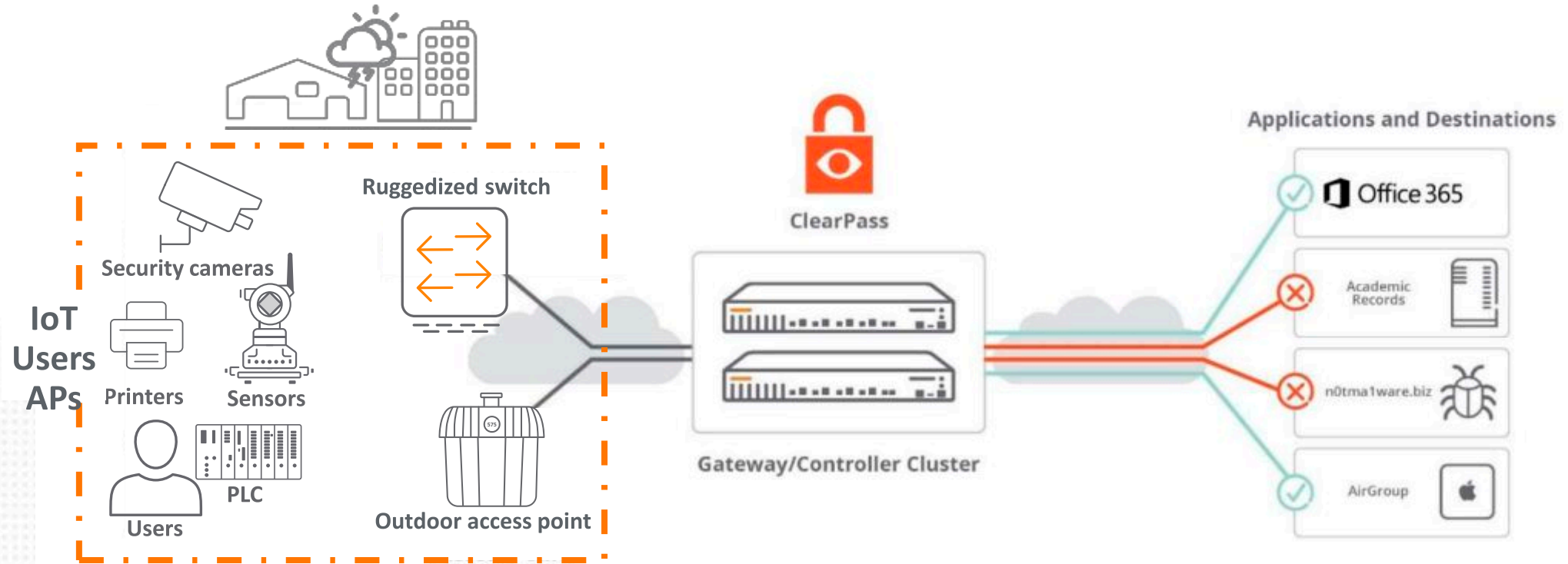
Aruba CX 4100i 24G CL4/6 POE 4SFP+ Switch

- 24 ports 10/100/1000 Base-T
- 4 ports 100/1G/10G SFP+ slots
- Fan-less and IP30
- 4 ports of PoE IEEE 802.3bt (60W/port) and 20 ports of 802.3at PoE (30W/port)
- Internal power supply supporting up to 240W PoE power
- PoE Power:
 - Normal (-40°C to +50°C): 240W
 - Derated (+50°C to +70°C): 160W



Securely add IoT, users, and access points

Extending Aruba Dynamic Segmentation beyond carpeted spaces



AUTOMATED

Save time and reduce misconfigurations

SEGMENTED

Improve traffic separation and security posture

CENTRALIZED

Enhance visibility and management



Simplify Operations with a Unified Infrastructure

Unique architecture provides management flexibility with same switch

Central



**Cloud-based
wired + wireless access
network management**

COP



**On-prem
wired + wireless access
network management**

CLI

NetEdit
for AOS-CX

Web GUI



**Web interface for
single switch network
management**

Central support for CX 4100i planned for future release.



Aruba CX 4100i details

Feature		Aruba CX 4100i 12G CL4/6 POE 2SFP+ DIN Switch	Aruba CX 4100i 24G CL4/6 POE 4SFP+ Switch
Platform	Services	Layer 2, static routing	
	Network OS	AOS-CX	
Environmental Specs	IP rating	IP30	
	Fanless	Yes	
	Operating Temperature Range ¹	-40°C to +70°C	
	Humidity	5% to 95%	
	Power Supply	DIN mount external PSU	Internal PSU
	Power Source	AC and DC	AC
Connectivity	Access ports	12 x 1GbE	24 x 1GbE
	10G uplinks	2 x 10GbE SFP	4 x 10GbE SFP
Power over Ethernet	PoE Budget (max)	360W (with 480W PSU)	240W
	IEEE 802.3at Class 4 PoE (30W)	8 ports	20 ports
	IEEE 802.3bt Class 6 PoE (60W)	4 ports (also support 802.3at)	4 ports (also support 802.3at)
	Always On PoE, Quick PoE	Yes	
Security	ACLs	IPv4, IPv6, VLAN, MAC	
	Dynamic Segmentation	Yes (Local User Roles)	
Management and Automation	Full Programmability	Complete REST APIs	
	Web GUI	Yes	
	CLI	Yes	
	Cloud-based	Aruba Central ²	
	Advanced configs	Central ² Multi-editor mode, Aruba NetEdit	
Licensing and Warranty	Licensing	No switch software feature licensing required	
	Warranty	5 year Warranty - warranty information	

¹Temperature derated to 50C if non-industrial temperature transceivers are used.

²Central support planned for future release.



Aruba CX 4100i DIN rail mount model

Fully manageable, ruggedized Layer 2 access switch



Aruba CX 4100i 12G CL4/6 POE 2SFP+ DIN Switch

- 12 ports 10/100/1000 BaseT
- 2 ports 100/1G/10G SFP+ slots
- Fan-less and IP30
- 4 ports of PoE IEEE 802.3bt (60W/port) and 8 ports of 802.3at PoE (30W/port)
- 3 external PSU choices for up to 360W PoE
- DIN mountable (rack mountable with kit)
- 2 EPS input connections

3 power supplies (external)

AC-DC
480W

AC-DC
240W

DC-DC
240W



PoE power budget based on temperature and DC voltage

PoE power budget based on temperature and DC voltage

External PSUs for CX 4100i DIN rail mount model



PoE Power budget	AC-DC 480W PSU	AC-DC 240W PSU	DC-DC 240W PSU
Normal (-40°C to +50°C)	360W	180W	180W @48-55VDC 155W @24VDC 60W@12VDC
Derated (+50°C to +70°C)	~200W	80W	150W@48-55VDC 150W@24VDC 50W@12VDC

Aruba CX 4100i rack mount model

Fully manageable, ruggedized Layer 2 access switch



Aruba CX 4100i 24G CL4/6 POE 4SFP+ Switch

- 24 ports 10/100/1000 Base-T
- 2 ports 100/1G/10G SFP+ slots
- Fan-less and IP30
- 4 ports of PoE IEEE 802.3bt (60W/port) and 20 ports of 802.3at PoE (30W/port)
- Internal power supply supporting up to 240W PoE power
- PoE Power:
 - Normal (-40°C to +50°C): 240W
 - Derated (+50°C to +70°C): 160W

Aruba CX 4100i accessories

Industrial transceivers, power supplies, rack mount kit

Ruggedized accessories	Specification
1000M SX	Max Transmission distance ~0.5km (OM2) (MMF only)
1000M LX	Max Transmission distance 10km (SMF) Max Transmission distance ~0.5km (MMF)
10GBase-SR	Max Transmission distance ~0.4km (OM4) (MMF only)
10GBase-LR	Max Transmission distance 10km (SMF)
480W DIN AC-DC PSU	DIN Rail Power Supply – 54V 480W 1 Phase AC-DC and 100-240VAC input
240W DIN AC-DC PSU	DIN Rail Power Supply – 54V 240W AC-DC and 12-54VDC input
240W DIN DC-DC PSU	DIN Rail Power Supply – 54V 240W DC-DC and 12-48VDC input
DIN-to-Rack Kit	DIN-to-Rack Mounting Accessory

Industrial transceiver temperature range: -40C(-40F) to +85C(185F)

Transceiver Warranty: 3yrs



Agenda

01

Introduction

02

Product overview

03

Ordering information

04

Resources

Ordering information

Aruba CX 4100i Switch Series	
JL817A	Aruba 4100i 12-port 1GbE (8-port Class 4 POE and 4-port Class 6 POE) 2-port SFP+ DIN Mount Switch
JL818A	Aruba 4100i 24-port 1GbE (20-port Class 4 POE and 4-port Class 6 POE) 4-port SFP+ Switch
JL819A	Aruba 4000i POE 54VDC 240W 100-240VAC DIN Power Supply
JL820A	Aruba 4000i POE 54VDC 480W 100-240VAC DIN Power Supply
JL821A	Aruba 4000i POE 54VDC 240W 12-48VDC DIN Power Supply
JL822A	Aruba DIN Rail 3RU 19inch Rack Mount Kit
J9583B	Aruba X414 1U Universal 4-post RM Kit
JL780A	Aruba 1G I-Tmp SFP LC SX 500m MMF XCVR
JL781A	Aruba 1G I-Tmp SFP LC LX 10km SMF XCVR
JL782A	Aruba 10G I-Tmp SFP+ LC SR 300m MMF XCVR
JL783A	Aruba 10G I-Tmp SFP+ LC LR 10km SMF XCVR

Availability: September 2021



Agenda

01

Introduction

02

Product overview

03

Ordering information

04

Resources

Aruba ecosystem

Flexible Consumption



HPE GreenLake
for Aruba



HPE Financial
Services

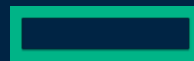
Services and Support



Aruba Global Services
Foundation Care for Aruba
and 24x7 TAC



Aruba Professional
Services – CX Migration



HPE Pointnext
Global Services

Community Engagement

airheads
COMMUNITY

ARUBA SOLUTION
EXCHANGE

Automation Ecosystem



GitHub

Optimize your CX switch experience



Resources

Learn more here

[Aruba CX 4100i At A Glance](#)

[Aruba Switches](#)

[Aruba Software and Hardware Warranties](#)

[24x7 Technical Support and Aruba Foundation Care](#)

[Software Releases and Documentation](#)



Thank you

vadim@ag-tech.kz

+7 777 772-22-30

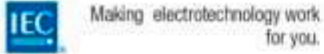
Vadim Krasnyanchuk

r.nurpeissov@ag-tech.kz

+7 701 999-28-76

Ruslan Nurpeisov

IEC ingress protection (IP) ratings explained



Ingress protection (IP) ratings guide

IP ratings are represented by combining the first and second digits of the below columns

1 st numeral - solid foreign objects		2 nd numeral - water	
0	No protection	0	No protection
1	Protected against solid foreign objects of 50 mm Ø and greater	1	Protected against vertically falling water drops
2	Protected against solid foreign objects of 12.5 mm Ø and greater	2	Protected against vertically falling water drops when enclosure tilted up to 15°
3	Protected against solid foreign objects of 2.5 mm Ø and greater	3	Protected against spraying water
4	Protected against solid foreign objects of 1.0 mm Ø and greater	4	Protected against splashing water
5	Dust-protected	5	Protected against water jets
6	Dust-tight	6	Protected against powerful water jets
		7	Protected against the effects of temporary immersion in water
		8	Protected against the effects of continuous immersion in water
		9	Protected against high pressure and temperature water jets

Example: + = **IP 65** - Protected against water jets
→ Dust-tight

IP Rating

The IEC has developed the ingress protection (IP) ratings, which grades the resistance of an enclosure against the intrusion of dust or liquids.

The IP code is composed of two numerals:

- The first numeral refers to the protection against solid objects and is rated on a scale from 0 (no protection) to 6 (no ingress of dust).
- The second numeral rates the enclosure's protection against liquids and uses a scale from 0 (no protection) to 9 (high-pressure hot water from different angles).

IEC IP rating information

Aruba CX 4100i - IP30 rating

Protected from tools and wires greater than 2.5 millimeters. Not protected from liquids.

