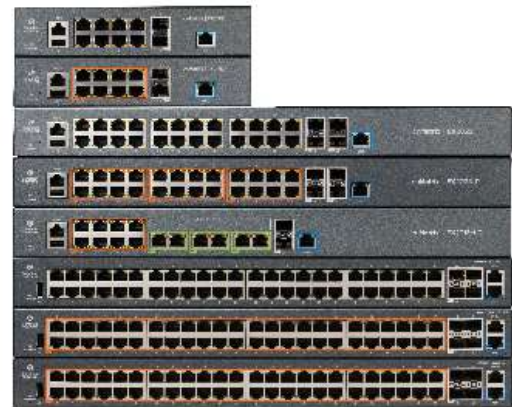


# cnMatrix™ EX2000 Series Switches

## QUICK LOOK:

- **Zero-touch deployments**
- **Policy Based Automation**
- **Auto device profiling and segmentation**
- **Non-blocking, line-rate architecture with fully featured L2/L3 switching**



cnMaestro



XMS

Cambium Networks' next generation switching platform offers a cloud managed, high performance, feature rich enterprise grade ethernet switching solution.

The cnMatrix platform of switches provides:

- Easy and simple, free cloud (or on premise) management with cnMaestro™ or XMS
- Zero-touch deployment of switches makes installation easy
- Policy Based Automation eliminates manual and time consuming configuration
- Enhanced Security with automated device profiling and segmentation
- Policy Based Automation eliminates manual configuration during adds, moves and changes of network devices
- Unified Wired-Wireless access solution



The cnMatrix series of fully managed switches delivers full Layer 2 and Layer 3 capabilities with enhanced access security. Depending on the model, the cnMatrix EX2000 series offers flexibility with SFP+ (10 Gbps) or SFP (1 Gbps) uplink ports. These switches come with a 5-Year Limited Lifetime Warranty

## cnMatrix™ EX2000 Series Switches

| Specifications                                   |                        |          |                        |           |                        |          |                        |          |
|--|------------------------|----------|------------------------|-----------|------------------------|----------|------------------------|----------|
|  | EX2052                 | EX2052-P | EX2052R-P              | EX2016M-P | EX2028-P               | EX2028   | EX2010-P               | EX2010   |
| <b>Throughput</b>                                | 176 Gbps               | 176 Gbps | 176 Gbps               | 86 Gbps   | 128 Gbps               | 128 Gbps | 20 Gbps                | 20 Gbps  |
| <b>Forwarding Rate in Mpps (64 Byte Packets)</b> | 120                    | 120      | 120                    | 120       | 120                    | 120      | 120                    | 120      |
| <b>10/100/1000 Ports</b>                         | 48                     | 48       | 48                     | 8         | 24                     | 24       | 8                      | 8        |
| <b>2.5 G Ports</b>                               | n/a                    | n/a      | n/a                    | 6         | n/a                    | n/a      | n/a                    | n/a      |
| <b>Uplink Ports</b>                              | 4 SFP+                 | 4 SFP+   | 4 SFP+                 | 2 SFP+    | 4 SFP+                 | 4 SFP+   | 2 SFP                  | 2 SFP    |
| <b>PoE+ Enabled Ports 802.3af/at</b>             | n/a                    | 48       | 48                     | 8         | 24                     | n/a      | 8                      | n/a      |
| <b>PoE+ Enabled Ports 802.3af/at/bt</b>          | 0                      | 0        | 0                      | 6         | 0                      | 0        | 0                      | 0        |
| <b>Serial Console</b>                            | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | ✓                      | ✓        |
| <b>USB</b>                                       | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | ✓                      | ✓        |
| <b>Out-of-Band Management Port</b>               | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | ✓                      | ✓        |
| <b>Rack Mount Kit</b>                            | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | Optional               | Optional |
| <b>Internal Fans</b>                             | 2                      | 2        | 2                      | 2         | 2                      | Fanless  | Fanless                | Fanless  |
| <b>Reset Button</b>                              | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | ✓                      | ✓        |
| <b>MAC Address Table Size</b>                    | 16K                    | 16K      | 16K                    | 16K       | 16K                    | 16K      | 16K                    | 16K      |
| <b>Flash Storage</b>                             | 128 MB                 | 128 MB   | 128 MB                 | 128 MB    | 128 MB                 | 128 MB   | 128 MB                 | 128 MB   |
| <b>DRAM</b>                                      | 512 MB                 | 512 MB   | 512 MB                 | 512 MB    | 512 MB                 | 512 MB   | 512 MB                 | 512 MB   |
| <b>VLANs</b>                                     | 4K                     | 4K       | 4K                     | 4K        | 4K                     | 4K       | 4K                     | 4K       |
| <b>QinQ*</b>                                     | Yes                    | Yes      | Yes                    | Yes       | Yes                    | Yes      | Yes                    | Yes      |
| <b>LACP/Trunking</b>                             | 8 LAGs/8 links per LAG |          | 8 LAGs/8 links per LAG |           | 8 LAGs/8 links per LAG |          | 8 LAGs/8 links per LAG |          |
| <b>QoS Priority Queues</b>                       | 8                      | 8        | 8                      | 8         | 8                      | 8        | 8                      | 8        |
| <b>PVRST</b>                                     | 32                     | 32       | 32                     | 32        | 32                     | 32       | 32                     | 32       |
| <b>Ingress/Egress ACL</b>                        | 128                    | 128      | 128                    | 128       | 128                    | 128      | 128                    | 128      |
| <b>Static ARP Entries</b>                        | 512                    | 512      | 512                    | 512       | 512                    | 512      | 512                    | 512      |
| <b>ARP Entries</b>                               | 512                    | 512      | 512                    | 512       | 512                    | 512      | 512                    | 512      |
| <b>Static Routes</b>                             | 64                     | 64       | 64                     | 64        | 64                     | 64       | 64                     | 64       |
| <b>Dynamic Routing</b>                           | 512                    | 512      | 512                    | 512       | 512                    | 512      | 512                    | 512      |
| <b>IGMP Multicast Groups</b>                     | 256                    | 256      | 256                    | 256       | 256                    | 256      | 256                    | 256      |
| <b>Policy Based Automation</b>                   | ✓                      | ✓        | ✓                      | ✓         | ✓                      | ✓        | ✓                      | ✓        |

\* Feature to be included in a future release.

## cnMatrix™ EX2000 Series Switches

### Specifications - All Models

|                           |   |                            |   |
|---------------------------|---|----------------------------|---|
| <b>Quality of Service</b> | ACL mapping and marking of ToS/DSCP (COS)<br><hr/> ACL mapping marking of 802.1p<br><hr/> ACL mapping to priority queue<br><hr/> DiffServ support<br><hr/> Honoring DSCP and 802.1p (CoS)<br><hr/> Traffic shaping/metering<br><hr/> Priority queue management using Weighted Round Robin (WRR), Strict Priority (SP) and a combination of WRR and SP | <b>Layer 2 Feature Set</b> | 802.1s multiple spanning tree<br><hr/> VLAN, Port, Protocol, 802.1q<br><hr/> QinQ*<br><hr/> 802.1d<br><hr/> 802.1x authentication<br><hr/> Auto MDI/MDIX<br><hr/> BPDU Guard, Root Guard<br><hr/> IGMP Snooping v1/v2/v3*, Fast Leave<br><hr/> LLDP/LLDP MED<br><hr/> IGMP Proxy<br><hr/> Static MAC<br><hr/> Flow Control per port<br><hr/> Per VLAN STP (PVST/PVRST)<br><hr/> Port Mirroring: port based, ACL based, VLAN based<br><hr/> Port Isolation/Private VLAN Edge<br><hr/> Link Aggregation Groups (Static/LACP)<br><hr/> Rate Limiting/Storm Control<br><hr/> Jumbo frame (9k)<br><hr/> DHCP Snooping<br><hr/> BPDU filtering<br><hr/> Broadcast/Multicast/Unlearned Unicast (Storm Control)<br><hr/> DoS Protection<br><hr/> Ping/TraceRoute/ICMPv6 |
| <b>Traffic Management</b> | ACL-based inbound rate limiting policies<br><hr/> Broadcast, multicast and unknown unicast rate limiting<br><hr/> Inbound rate limiting per port<br><hr/> Outbound rate limiting per port/queue   |                            |   |
| <b>Security</b>           | 802.1x authentication<br><hr/> MAC authentication*<br><hr/> DHCP snooping<br><hr/> RADIUS authentication/authorization<br><hr/> Radius/Tacacs/Tacacs+<br><hr/> Authentication, Authorization, and Accounting (AAA)<br><hr/> Secure shell<br><hr/> Secure copy (SCP)*<br><hr/> Local username/password   |                            |   |

\* Feature to be included in a future release.

#### Layer 3 Feature Set

Inter-VLAN Routing  


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 Static ARPs  


---

 Static Routes  


---

 DHCP Relay

Dynamic Routing – RIPv1/v2  


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 Dynamic Routing – OSPFv2  


---

 Route Redistribution

## cnMatrix™ EX2000 Series Switches

### Specifications - All Models cont'd

#### Management

|  |  |
|--|--|
| cnMaestro or XMS (cloud management)            | Simple Network Time Protocol (SNTP)                      |
| Industry standard Command Line Interface (CLI) | Local/remote system logging                              |
| DHCP Client                                    | Policy Based Automation                                  |
| Embedded web management (HTTP/HTTPS)           | Display log messages multiple terminals*                 |
| Embedded DHCP server                           | TFTP/SFTP  |
| USB file management and storage                | Telnet client/server                                     |
| Out-of-Band Ethernet Management                | IPv6 management  |
| SSH / SSH v2                                   | Password management                                      |
| SNMP v1/v2/v3                                  | Autoinstall support for firmware images and config files |
| DHCP relay                                     |  |

#### Security

PERMIT/DENY ACTIONS FOR INBOUND IP AND LAYER 2 TRAFFIC CLASSIFICATION BASED ON:

|   |  |
|---|--|
| Source/Destination IP address                                 | EtherType  |
| TCP/UDP Source/Destination port                               | IEEE 802.1p user priority                                  |
| IP Protocol Type  | VLAN ID  |
| Type of Service (ToS) or differentiated services (DSCP) field | RFC 1858—Security Considerations for IP Fragment Filtering |
| Source/Destination MAC address                                |  |

\* Feature to be included in a future release.

### Hardware Specifications

|  | EX2052                                   | EX2052-P                                  | EX2052R-P                                 | EX2016M-P                                | EX2028-P                                 | EX2028                                     | EX2010-P                                 | EX2010                                   |
|--|--|---|---|--|--|--|--|--|
| <b>Power Supply</b>                    | 100-240 VAC                              | 100-240 VAC                               | CRPS dependent                            | 100-240 VAC                              | 100-240 VAC                              | 100-240 VAC                                | 100-240 VAC                              | 100-240 VAC                              |
| <b>Max Switch Power (WITH TRAFFIC)</b> | 38.88W                                   | 39.24W                                    | 46.98W                                    | 26.76W                                   | 25.10W                                   | 19.50W                                     | 10.54W                                   | 9.88W                                    |
| <b>MTBF (Hours)</b>                    | 393,648                                  | 238,063                                   | 202,977                                   | 385,242                                  | 285,350                                  | 432,283                                    | 338,917                                  | 806,354                                  |
| <b>Weight</b>                          | 3.6 kg (7.93 lb)                         | 5.4 kg (11.90 lb)                         | 4.3 kg (9.48 lb) or 5.2 kg (11.46 lb)     | 3.6 kg (7.93 lb)                         | 3.96 kg (8.75 lb)                        | 2.77 kg (6.1 lb)                           | 1.99 kg (4.375 lb)                       | 1.6 kg (3.5375 lb)                       |
| <b>Dimensions</b>                      | 44 x 4.4 x 25 cm (17.3 x 1.75 x 9.85 in) | 44 x 4.4 x 35 cm (17.3 x 1.75 x 13.78 in) | 44 x 4.4 x 35 cm (17.3 x 1.75 x 13.78 in) | 44 x 4.4 x 25 cm (17.3 x 1.75 x 9.85 in) | 44 x 4.4 x 25 cm (17.3 x 1.75 x 9.85 in) | 44 x 4.4 x 20.9 cm (17.3 x 1.75 x 8.22 in) | 21 x 4.4 x 25 cm (8.26 x 1.75 x 9.85 in) | 21 x 4.4 x 25 cm (8.26 x 1.75 x 9.85 in) |
| <b>CPU Speed</b>                       | 800 MHz                                  | 800 MHz                                   | 800 MHz                                   | 800 MHz                                  | 800 MHz                                  | 800 MHz                                    | 800 MHz                                  | 800 MHz                                  |
| <b>LEDs Per Port</b>                   | Link/Activity                            | Link/Activity, PoE                        | Link/Activity, PoE                        | Link/Activity, PoE                       | Link/Activity, PoE                       | Link/Activity                              | Link/Activity, PoE                       | Link/Activity                            |
| <b>PoE+ Power Budget</b>               | n/a                                      | 400W                                      | CRPS dependent                            | 240W                                     | 400W                                     | n/a  | 100W                                     | n/a                                      |
| <b>PoE + Voltage</b>                   | n/a                                      | 54V                                       | 54V                                       | 5 V                                      | 54V                                      | n/a  | 54V                                      | n/a                                      |

## cnMatrix™ EX2000 Series Switches

### Hardware Specifications cont'd

|                               | EX2052                            | EX2052-P                          | EX2052R-P                         | EX2016M-P                         | EX2028-P                          | EX2028                            | EX2010-P                          | EX2010                            |
|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>PoE Max Power Per Port</b> | n/a                               | 30W                               | 30W                               | 30W, 60W                          | 30W                               | n/a                               | 30W                               | n/a                               |
| <b>Rack Mountable</b>         | Yes 1U                            | Yes 1U                            | Yes 1U                            | Yes 1U                            | Yes 1U                            | Yes 1U                            | Yes 1U                            | Yes 1U                            |
| <b>Temperature Ranges</b>     | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    | 0°C to 50°C<br>(32°F to 122°F)    |
| <b>Operating Humidity</b>     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     | 55° at 95% RH                     |
| <b>Storage Temperature</b>    | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) | -40°C to 70°C<br>(-40°F to 158°F) |

### Acoustic Noise dBA Per Switch (AMBIENT TEMPERATURE)

**EX2052** 40.9 dB - < 33°C, 44.2 dB - 30°C-40°C, 47.3 dB - > 43°C

**EX2052-P** 48.5 dB - < 33°C, 51.3 dB - 30°C-40°C, 54.0 dB - > 43°C

**EX2052R-P** 1200W CRPS: 74.5 dB - < 33°C, 74.3 dB - 30°C-40°C, 74.3 dB - > 43°C,  
930W CRPS: 70.8 dB - < 33°C, 70.7 dB - 30°C-40°C, 70.7 dB - > 43°C,  
600W CRPS: 67.2 dB - < 33°C, 67.3 dB - 30°C-40°C, 67.5 dB - > 43°C

**EX2016M-P** 44.4 dB - < 33°C, 46.9 dB - 30°C-40°C, 49.3 dB - > 43°C

**EX2028-P** 40 dB - < 33°C, 44.3 dB - 30°C-40°C, 52 dB - > 43°C

**EX2028** Fanless

**EX2010-P** Fanless

**EX2010** Fanless

## cnMatrix™ EX2000 Series Switches

### IEEE Standards

#### Switching

##### Core Switching Features

|  |
|--|
| IEEE 802.1ab—Link Layer Discovery Protocol (LLDP)                |
| IEEE 802.1D—Spanning tree compatibility                          |
| IEEE 802.1p—Ethernet priority with user provisioning and mapping |
| IEEE 802.1s—Multiple spanning tree compatibility                 |
| IEEE 802.1Q—Virtual LANs with port-based VLANs                   |
| IEEE 802.1X—Port-based authentication                            |

##### VLAN Support

|  |
|--|
| IEEE 802.1W—Rapid spanning tree compatibility                              |
| IEEE 802.3—10BASE-T  |
| IEEE 802.3u—100BASE-T  |
| IEEE 802.3ab—1000BASE-T  |
| IEEE 802.3ac—VLAN tagging  |
| IEEE 802.3ad—Link aggregation  |
| IEEE 802.3x —Flow control  |
| Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol |

##### IEEE 802.1Q-2003

RFC 4541—Considerations for Internet Group Management Protocol (IGMP) Snooping Switches

ANSI/TIA-1057—LLDP-MEDia Endpoint Discovery (MED)

##### Advanced Layer 2 Features

|   |
|---|
| Authentication, Authorization, and Accounting (AAA) |
| IEEE 802.1ad (QinQ)*                                |
| Broadcast/Multicast/Unknown unicast storm recovery  |
| DHCP Snooping                                       |
| IGMP Snooping Querier                               |
| Independent VLAN Learning (IVL) support             |
| Jumbo Ethernet frame support                        |
| Port MAC locking                                    |
| Port mirroring                                      |
| Protected ports                                     |
| Static MAC filtering                                |

##### Layer 3 Features

|                           |
|---------------------------|
| Inter-VLAN Routing        |
| Static ARP                |
| Static Routes             |
| RFC 2131 – DHCP Relay     |
| RFC 2328 – OSPF Version 2 |
| RFC 2453 – RIP Version 2  |

\* Feature to be included in a future release.

## cnMatrix™ EX2000 Series Switches

### System Facilities

Event and error logging facility

Run-time and configuration download capability

PING utility

FTP Transfers via IPv4/IPv6

RFC 768—UDP

RFC 783—TFTP

RFC 791—IP

RFC 792—ICMP

RFC 793—TCP

RFC 826—ARP

RFC 894—Transmission of IP datagrams over Ethernet networks

RFC 896—Congestion control in IP/TCP networks

RFC 951—BOOTP

RFC 1034—Domain names - concepts and facilities

RFC 1035—Domain names - implementation and specification

RFC 1321—Message digest algorithm

RFC 1534—Interoperability between BOOTP and DHCP

RFC 2021—Remote network monitoring management information base version 2

RFC 2030—Simple Network Time Protocol (SNTP)

RFC 2132—DHCP options and BOOTP vendor extensions

RFC 2819—Remote Network Monitoring Management Information Base

RFC 2865—RADIUS client

RFC 2869—RADIUS Extensions

RFC 3579—RADIUS support for EAP

RFC 3580—IEEE 802.1X RADIUS usage guidelines

RFC 3164—BSD syslog protocol

RFC 3580—802.1X RADIUS Usage Guidelines

\* Feature to be included in a future release.

### Management

SNMP v1, v2, and v3

SSH 1.5 and 2.0

RFC 4252—SSH authentication protocol

RFC 4253—SSH transport layer protocol

RFC 4254—SSH connection protocol

RFC 4251—SSH protocol architecture

RFC 4716—SECSH public key file format

RFC 4419—Diffie-Hellman group exchange for SSH transport layer protocol

SSL 3.0 and TLS 1.0

RFC 2246—TLS protocol, version 1.0

RFC 2818—HTTP over TLS

RFC 3268—AES cipher suites for transport layer security

Telnet

Web GUI

## cnMatrix™ EX2000 Series Switches

### SNMP MIBs

#### Enterprise MIBs for Full Configuration Support of Switching Features

|   |  |
|---|--|
| RFC 1213—MIB II   | RFC 2819—RMON groups 1, 2, 3, and 9  |
| RFC 1493—Bridge MIB   | RFC 2863—IF-MIB  |
| RFC 1612—DNS resolver MIB extensions                                      | RFC 2925—Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations |
| RFC 1643—Definitions of managed objects for Ethernet-like interface types | RFC 3273—RMON Groups 1, 2, and 3   |
| RFC 2233—Interfaces group MIB using SMI v2                                | RFC 3291—Textual conventions for Internet network addresses                                |
| RFC 2613—SMON MIB   | RFC 3434—RMON Groups 1, 2, and 3   |
| RFC 2618—RADIUS authentication client MIB                                 | RFC 4022—TCP-MIB   |
| RFC 2674—VLAN MIB   | RFC 4113—UDP-MIB   |
| RFC 2737—Entity MIB version 2*  |  |

\* Feature to be included in a future release.

#### Quality of Service MIBs

|   |  |
|---|--|
| MIBs for full configuration support of DiffServ, ACL, and CoS functionality | RFC 3289—Management information base for DiffServ architecture (read-only) |
|---|--|

### Quality of Service

#### Classify Traffic Based on Same Criteria as ACLs and Optionally:

|  |  |
|--|--|
| Mark the IP DSCP or Precedence header fields   | RFC 2475—An architecture for differentiated services |
| Police the flow to a specific rate with two-color aware support                                  | RFC 2597—Assured forwarding Per-Hop Behavior         |
| RFC 2474—Definition of the differentiated services field (DS field) in the IPv4 and IPv6 headers |  |



## cnMatrix™ EX2000 Series Switches

### cnMatrix Ordering Information

| Type        | Part #         | Description  |
|-------------|----------------|--|
| Switch      | MXEX2052GxxA00 | Intelligent Ethernet Switch, 48 x 1 Gbps and 4 SFP+ - no power cord  |
| Switch      | MXEX2052GxPA00 | Intelligent Ethernet PoE Switch, 48 x 1 Gbps and 4 SFP+ Fixed 540 - no power cord                              |
| Switch      | MXEX2052GxPA10 | Intelligent Ethernet PoE Switch, 48 x 1 Gbps and 4 SFP+, Removable Power Supply (not included) - no power cord |
| Switch      | MXEX2016MxPA00 | Intelligent Ethernet PoE Switch, 8 x 1 Gbps + 6 x 2.5 Gbps + 2 x SFP+, no power cord                           |
| Switch      | MX-EX2028PxA-0 | Intelligent Ethernet PoE Switch, 24 x 1 Gbps and 4 SFP+ fiber ports - no power cord                            |
| Switch      | MX-EX2028xxA-0 | Intelligent Ethernet Switch, 24 x 1 Gbps and 4 SFP+ fiber ports - no power cord                                |
| Switch      | MX-EX2010PxA-0 | Intelligent Ethernet PoE Switch, 8 x 1 Gbps and 2 SFP fiber ports - no power cord                              |
| Switch      | MX-EX2010xxA-0 | Intelligent Ethernet Switch, 8 x 1 Gbps and 2 SFP fiber ports - no power cord                                  |
| CRPS        | MXCRPSAC600A0  | 600W total Power, no power cord  |
| CRPS        | MXCRPSAC930A0  | 930W total Power, no power cord  |
| CRPS        | MXCRPSAC1200A0 | 1200W total Power, no power cord   |
| CRPS        | MXCRPSDC600A0  | 600W total Power, 36v–72v, includes 3m cable connector   |
| CRPS        | MXCRPSDC930A0  | 930W total Power, 36v–72v, includes 3m cable connector   |
| CRPS        | MXCRPSDC1200A0 | 1200W total Power, 36v–72v, includes 3m cable connector  |
| Power Cord  | N000900L092A   | AC line cord, US Type B, 15A, 1.2 m C13 connector  |
| Rack Mount  | MX-EXTXHALFA-0 | Half-width switch rack mount kit   |
| Rack Mount  | MX-EXTXFULLA-1 | Full-width switch rack mount kit   |
| Transceiver | SFP-10G-SR     | 10G SFP+ MMF SR Transceiver, 850 nm. -40°C to 85°C (-40°F to 185°F)  |
| Transceiver | SFP-1G-SX      | 1G SFP MMF SX Transceiver, 850 nm. -40°C to 85°C (-40°F to 185°F)  |
| Transceiver | SFP-10G-LR     | 10G SFP+ SMF LR Transceiver, 1310 nm. -40°C to 85°C (-40°F to 185°F)   |
| Transceiver | SFP-1G-LX      | 1G SFP SMF LX Transceiver, 1310 nm. -40°C to 85°C (-40°F to 185°F)   |
| Transceiver | SFP-1G-Copper  | 1000Base-T (RJ45) SFP Transceiver. -40°C to 85°C (-40°F to 185°F)  |
| Transceiver | SFP-10G-Copper | 10G Base-T (RJ45) SFP Transceiver. 0°C to 70°C (-40°F to 185°F)  |



EX2010



EX2010-P



EX2016M-P



EX2028



EX2028-P



EX2052



EX2052-P



EX2052R-P / CRPS

## cnMatrix™ EX2000 Series Switches

| cnMatrix Ordering Information |                |  |
|-------------------------------|----------------|--|
| <b>XMS Cloud</b>              | XMSC-SUB-10P-1 | XMS-Cloud 1-year subscription for 10 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-10P-3 | XMS-Cloud 3-year subscription for 10 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-10P-5 | XMS-Cloud 5-year subscription for 10 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-16P-1 | XMS-Cloud 1-year subscription for 16 port cnMatrix multi-GigE switch including Policy-Based Automation and Cambium Care Advanced Support |
| <b>XMS Cloud</b>              | XMSC-SUB-16P-3 | XMS-Cloud 3-year subscription for 16 port cnMatrix multi-GigE switch including Policy-Based Automation and Cambium Care Advanced Support |
| <b>XMS Cloud</b>              | XMSC-SUB-16P-5 | XMS-Cloud 5-year subscription for 16 port cnMatrix multi-GigE switch including Policy-Based Automation and Cambium Care Advanced Support |
| <b>XMS Cloud</b>              | XMSC-SUB-28P-1 | XMS-Cloud 1-year subscription for 28 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-28P-3 | XMS-Cloud 3-year subscription for 28 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-28P-5 | XMS-Cloud 5-year subscription for 28 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-52P-1 | XMS-Cloud 1-year subscription for 52 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-52P-3 | XMS-Cloud 3-year subscription for 52 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>XMS Cloud</b>              | XMSC-SUB-52P-5 | XMS-Cloud 5-year subscription for 52 port cnMatrix switch including Policy-Based Automation and Cambium Care Advanced Support            |
| <b>Cambium Care Advanced</b>  | CCADV-SUP-xxx  | Cambium Care Advanced, 1, 3 or 5-year support for one cnMatrix switch. 24x7 TAC support, SW updates, and NBDS advance replacement for HW |
| <b>Cambium Care Pro</b>       | CCPRO-SUP-xxx  | Cambium Care Pro, 1, 3 or 5-year support for one cnMatrix switch. 24x7 TAC support and SW updates  |

### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

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