



OcNOS OTN Version 1.1.0 Feature Matrix

Release Dates

December 2019 - 1.0.0

March 2020 - 1.0.1

August 2020 - 1.0.2

October 2020 - 1.0.3

November 2020 - 1.0.4

November 2020 - 1.1.0

For additional information, please contact:	support@ipinfusion.com

Column Headings

Feature name	Name of the feature
Standard	IEEE or IETF standard upon which the feature is based, such as an RFC
First Version Supported	Version when the feature became available
Platforms	Whether a given switch model supports the features

Features by SKU

Feature Name	OCNOS_OTN_IPBASE	OCNOS_OTN_XCONNECT
Layer 1		
xConnect	No	Yes
Layer 2		
Virtual Local Area Network (VLAN)		
Virtual LANs with Port-based VLANs	Yes	No
Routed VLAN interface	Yes	No
Port based VLAN interface	Yes	No
Spanning Tree Protocol (STP)		
STP	Yes	No
Multiple Spanning Tree Protocol (MSTP)	Yes	No
Rapid Spanning Tree (RSTP)	Yes	No
Link Aggregation		
Link Aggregation Control Protocol (LACP)	Yes	Yes
Static link aggregation group	Yes	Yes
Other Layer 2 Features		
BPDU Protect	Yes	No
Root Guard	Yes	No
Layer 3		
Address Resolution Protocol (ARP)		
Ethernet ARP	Yes	No
Routing		
Transmission of IP Datagrams over Ethernet	Yes	No
IP Subnetting	Yes	No
Classless Inter-Domain Routing (CIDR)	Yes	No
Requirements for IP Version 4 Routers	Yes	No
Route Redistribution	Yes	No

Features by SKU

Feature Name	OCNOS_OTN_IPBASE	OCNOS_OTN_XCONNECT
VLAN Routing	Yes	No
Border Gateway Protocol (BGP)		
Border Gateway Protocol, Version 4	Yes	No
BGP Route Reflection	Yes	No
BGP MIB	Yes	No
Open Shortest Path First (OSPF)		
Open Shortest Path First Version 2	Yes	No
Applicability statement for OSPF	Yes	No
Bidirectional Forwarding Detection Trigger for OSPFv2	Yes	No
OSPF Version 3 for IPv6 Support	Yes	No
Bidirectional Forwarding Detection (BFD) with default and non-default VRF support		
BFD	Yes	No
BFD for IPv4 single hop	Yes	No
BFD Over BGP / OSPF / Static route	Yes	No
BFD Over Non-default VRF for static (IPv4 & IPv6) and OSPF v2 & v3	Yes	No
VXLAN with EVPN		
L2 EVPN for VXLAN	Yes	No
Multicast		
Protocol Independent Multicast (PIM)		
PIM - Sparse Mode (PIM-SM)	Yes	No
Static Rendezvous Point Configuration	Yes	No
PIM - Source Specific Multicast	Yes	No
Source-Specific Multicast for IP	Yes	No

Features by SKU

Feature Name	OCNOS_OTN_IPBASE	OCNOS_OTN_XCONNECT
Source-Specific Protocol-Independent Multicast in 232/8	Yes	No
Overview of Source-Specific Multicast (SSM)	Yes	No
Internet Group Management Protocol (IGMP)		
IGMP, Version 2	Yes	No
IGMP, Version 3	Yes	No
Management		
Role based CLI management and access	Yes	Yes
CLI access via console, telnet and SSH	Yes	Yes
Authentication using TACACS+/radius client	Yes	Yes
Extended ping and traceroute	Yes	Yes
SNMP v1, v2, and v3	Yes	Yes
sFlow	Yes	No
Error Disable	Yes	No
Debounce Timer	Yes	No
DHCP client	Yes	No
DHCP relay	Yes	No
NTP	Yes	Yes
Syslog	Yes	Yes
File Upload/Download using FTP/TFTP/SFTP/SCP	Yes	Yes
Management VRF	Yes	Yes
Loopback and VTY based ACL	Yes	Yes
Licensing	Yes	Yes
Hardware-Specific Features		
General		
Dynamic load balancing (RTAG7 hash)	Yes	Yes

Features by SKU

Feature Name	OCNOS_OTN_IPBASE	OCNOS_OTN_XCONNECT
Port Breakout	Yes	Yes
Chassis Monitoring		
Temperature monitor	Yes	Yes
Fan control	Yes	Yes
Power Monitoring	Yes	Yes
CPU load monitoring	Yes	Yes
Board information (EEPROM)	Yes	Yes
Hardware MIB and Traps	Yes	Yes
Digital Diagnostics Monitoring		
Temperature monitor	Yes	Yes
Power Monitoring(Power, Current, Voltage)	Yes	Yes
Hardware MIB and Traps	Yes	Yes
Coherent Optics		
DCO module support	Yes	Yes
Module specific attributes	Yes	Yes
Network interface specific configuration & monitoring attributes such as Tx-Power, Tx-Laser-Frequency, Modulation format, FEC modes	Yes	Yes
Host interface specific attributes such as RS FEC type	Yes	Yes
DDM support	Yes	Yes

Platform Support Matrix

Platform	OCNOS_OTN_IPBASE	OCNOS_OTN_XCONNECT
EC_AS7716-24SC	✓	✓

Features by Platform

Feature Name	Standard	First Version Supported	Edgecore AS-7716-24SC
Layer 1			
xConnect	IPI Proprietary	1.1.0	Yes
Layer 2			
Virtual Local Area Network (VLAN)			
Virtual LANs with Port-based VLANs	IEEE 802.1Q (2005)	1.0.0	Yes
Routed VLAN interface		1.0.0	Yes
Port based VLAN interface		1.0.0	Yes
Spanning Tree Protocol (STP)			
STP	IEEE 802.1D (2004)	1.0.0	Yes
Multiple Spanning Tree Protocol (MSTP)	IEEE 802.1Q (2005): Clause 13	1.0.0	Yes
Rapid Spanning Tree (RSTP)	IEEE 802.1D (2004): Clause 17	1.0.0	Yes
Link Aggregation			
Link Aggregation Control Protocol (LACP)	IEEE802.3ad-2002	1.0.0	Yes
Static link aggregation group		1.0.0	Yes
Other Layer 2 Features			
BPDU Protect		1.0.0	Yes
Root Guard		1.0.0	Yes
Layer 3			
Address Resolution Protocol (ARP)			
Ethernet ARP	RFC 826	1.0.0	Yes
Routing			
Transmission of IP Datagrams over Ethernet	RFC 894	1.0.0	Yes
IP Subnetting	RFC 950	1.0.0	Yes
Classless Inter-Domain Routing (CIDR)	RFC 1519	1.0.0	Yes
Requirements for IP Version 4 Routers	RFC 1812	1.0.0	Yes
Route Redistribution		1.0.0	Yes
VLAN Routing		1.0.0	Yes
Border Gateway Protocol (BGP)			
Border Gateway Protocol, Version 4	RFC 4271	1.0.0	Yes
BGP Route Reflection	RFC 4456	1.0.0	Yes

Features by Platform

Feature Name	Standard	First Version Supported	Edgecore AS-7716-24SC
BGP MIB	RFC 4273	1.0.0	Yes
Open Shortest Path First (OSPF)			
Open Shortest Path First Version 2	RFC 2328	1.0.0	Yes
Applicability statement for OSPF	RFC 1370	1.0.0	Yes
OSPF Multiarea adjacency	RFC 5185	1.0.0	Yes
Bidirectional Forwarding Detection Trigger for OSPFv2		1.0.0	Yes
OSPF Version 3 for IPv6 Support	RFC 5340	1.0.0	Yes
Bidirectional Forwarding Detection (BFD) with default and non-default VRF support			
BFD	RFC 5880	1.0.2	Yes
BFD for IPv4 single hop	RFC 5881	1.0.2	Yes
BFD Over BGP / OSPF / Static route		1.0.2	Yes
BFD Over Non-default VRF for static (IPv4 & IPv6) and OSPF v2 & v3		1.0.2	Yes
VXLAN with EVPN			
L2 EVPN for VXLAN	RFC 7348, RFC 7432, draft-ietf-bess-evpn-overlay-04	1.1.0	Yes
Multicast			
Protocol Independent Multicast (PIM)			
PIM - Sparse Mode (PIM-SM)	RFC 4601	1.0.0	Yes
Static Rendezvous Point Configuration		1.0.0	Yes
PIM - Source Specific Multicast		1.0.0	Yes
Source-Specific Multicast for IP	RFC 4607	1.0.0	Yes
Source-Specific Protocol-Independent Multicast in 232/8	RFC 4608	1.0.0	Yes
Overview of Source-Specific Multicast (SSM)	RFC 3569	1.0.0	Yes
Internet Group Management Protocol (IGMP)			
IGMP, Version 2	RFC 2236	1.0.0	Yes
IGMP, Version 3	RFC 3376	1.0.0	Yes

Features by Platform

Feature Name	Standard	First Version Supported	Edgecore AS-7716-24SC
Management			
Role based CLI management and access		1.0.0	Yes
CLI access via console, telnet and SSH		1.0.0	Yes
Authentication using TACACS+/radius client		1.0.0	Yes
Extended ping and traceroute		1.0.0	Yes
SNMP v1, v2, and v3		1.0.0	Yes
sFlow		1.1.0	Yes
Error Disable		1.1.0	Yes
Debounce Timer		1.1.0	Yes
DHCP client		1.0.0	Yes
DHCP relay		1.1.0	Yes
NTP		1.0.0	Yes
Syslog		1.0.0	Yes
File Upload/Download using FTP/TFTP/SFTP/SCP		1.0.0	Yes
Management VRF		1.0.0	Yes
Loopback and VTY based ACL		1.1.0	Yes
Licensing		1.0.0	Yes
Hardware-Specific Features			
General			
Dynamic load balancing (RTAG7 hash)		1.0.0	Yes
Port Breakout		1.0.0	Yes
Chassis Monitoring			
Temperature monitor		1.0.0	Yes
Fan control		1.0.0	Yes
Power Monitoring		1.0.0	Yes
CPU load monitoring		1.0.0	Yes
Board information (EEPROM)		1.0.0	Yes
Hardware MIB and Traps		1.0.0	Yes
Digital Diagnostics Monitoring (Transceiver)			

Features by Platform

Feature Name	Standard	First Version Supported	Edgecore AS-7716-24SC
Temperature monitor		1.0.0	Yes
Power Monitoring(Power, Current, Voltage)		1.0.0	Yes
Hardware MIB and Traps		1.0.0	Yes
Coherent Optics			
DCO module support		1.0.1	Yes
Module specific attributes		1.0.1	Yes
Network interface specific configuration & monitoring attributes such as Tx-Power, Tx-Laser-Frequency, Modulation format, FEC modes		1.1.0	Yes
Host interface specific attributes such as RS FEC type		1.0.1	Yes
DDM support		1.1.0	Yes