



CHAPTER 5

Support Information for DragonWave Devices

This chapter contains support information for Virtual Network Elements (VNEs) that manage DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3. For more information about the objects and attributes described in this chapter, see the [Cisco Active Network Abstraction 3.7.2 Reference Guide](#).

This chapter contains the following topics:

- [DragonWave Horizon Compact Device \(Packet Microwave System\)](#), page 5-1
- [DragonWave Horizon Compact Plus Device \(Packet Microwave System\)](#), page 5-3
- [DragonWave Horizon Quantum Device \(Packet Microwave System\)](#), page 5-4
- [Supported Technologies on DragonWave Devices](#), page 5-6

DragonWave Horizon Compact Device (Packet Microwave System)

This section includes the following information about DragonWave Horizon Compact (Packet Microwave System) devices (for information on the NE types supported in Cisco ANA Version 3.7.2 and 3.7.3, see the [DragonWave Horizon Compact Device \(Packet Microwave System\)](#)):

This section contains the following topics:

- [Horizon Compact—Supported Software Versions](#), page 5-2
- [Horizon Compact—Supported Topologies](#), page 5-2
- [Horizon Compact—Supported Modules](#), page 5-2
- [Horizon Compact—Supported Technologies](#), page 5-2
- [Horizon Compact—Supported Service Events](#), page 5-3

Horizon Compact—Supported Software Versions

Table 5-1 *Supported Software Versions for Horizon Compact—Cisco ANA Version 3.7.2 and 3.7.3*

Software Version	ANA Version	DP Version
1.03.02	3.7.2/3.7.3	5.0
1.04.05	3.7.2/3.7.3	5.0

Horizon Compact—Supported Topologies

Table 5-2 *Supported Topologies for Horizon Compact—Cisco ANA Version 3.7.2 and 3.7.3*

Topology Type	Link Type	ANA Version	DP Version
Generic Port	Generic Port ¹	3.7.3/3.8	7.0

1. Currently it is supported by using generic methodology.

Horizon Compact—Supported Modules

Table 5-3 *Supported Modules for Horizon Compact—Cisco ANA Version 3.7.2 and 3.7.3*

Module Name	ANA Version	Module Description	DP Version
Horizon Compact	3.7.2/3.7.3	Horizon Compact is not a modular device. It contains 2 Ethernet ports and 1 Wireless port.	5.0

Horizon Compact—Supported Technologies

The following technologies are supported by the Horizon Compact devices in Cisco ANA Version 3.7.2 and 3.7.3:

- [Ethernet, page 5-7](#)
- [Hardware, page 5-8](#)
- [Serial, page 5-10](#)
- [Generic Port, page 5-10](#)

Horizon Compact—Supported Service Events

Table 5-4 Supported Service Events for Horizon Compact—Cisco ANA Version 3.7.2 and 3.7.3

Event Name	ANA Version	Expedited	DP Version
Link up	3.7.2/3.7.3	Y	5.0

DragonWave Horizon Compact Plus Device (Packet Microwave System)

This section includes the following information about DragonWave Horizon Compact Plus (Packet Microwave System) devices (for information on the NE types supported in Cisco ANA Version 3.7.2 and 3.7.3, see the [DragonWave Horizon Compact Plus Device \(Packet Microwave System\)](#)):

This section contains the following topics:

- [Horizon Compact Plus—Supported Software Versions](#), page 5-3
- [Horizon Compact Plus—Supported Topologies](#), page 5-3
- [Horizon Compact Plus—Supported Modules](#), page 5-4
- [Horizon Compact Plus—Supported Technologies](#), page 5-4
- [Horizon Compact Plus—Supported Service Events](#), page 5-4

Horizon Compact Plus—Supported Software Versions

Table 5-5 Supported Software Versions for Horizon Compact Plus—Cisco ANA Version 3.7.2 and 3.7.3

Software Version	ANA Version	DP Version
1.0.0	3.7.2/3.7.3	8.0

Horizon Compact Plus—Supported Topologies

Table 5-6 Supported Topologies for Horizon Compact Plus—Cisco ANA Version 3.7.2 and 3.7.3

Topology Type	Link Type	ANA Version	DP Version
Generic Port	Generic Port ¹	3.7.3	8.0

1. Currently it is supported by using LLDP methodology.

Horizon Compact Plus—Supported Modules

Table 5-7 Supported Modules for Horizon Compact Plus—Cisco ANA Version 3.7.2 and 3.7.3

Module Name	ANA Version	Module Description	DP Version
Horizon Compact Plus	3.7.2/3.7.3	Horizon Compact Plus is not a modular device. It contains Ethernet ports and Wireless ports.	8.0

Horizon Compact Plus—Supported Technologies

The following technologies are supported by the Horizon Compact devices in Cisco ANA Version 3.7.2 and 3.7.3:

- [Ethernet, page 5-7](#)
- [Ethernet OAM, page 5-7](#)
- [Hardware, page 5-8](#)
- [Serial, page 5-10](#)
- [Generic Port, page 5-10](#)
- [Local Switching, page 5-11](#)
- [LLDP, page 5-12](#)

Horizon Compact Plus—Supported Service Events

Table 5-8 Supported Service Events for Horizon Compact Plus—Cisco ANA Version 3.7.2 and 3.7.3

Event Name	ANA Version	Expedited	DP Version
Link up	3.7.2/3.7.3	Y	8.0

DragonWave Horizon Quantum Device (Packet Microwave System)

This section includes the following information about DragonWave Horizon Quantum (Packet Microwave Device) devices (for information on the NE types supported in Cisco ANA Version 3.7.2 and 3.7.3, see the [DragonWave Horizon Quantum Device \(Packet Microwave System\)](#)):

This section contains the following topics:

- [Horizon Quantum—Supported Software Versions, page 5-5](#)
- [Horizon Quantum—Supported Topologies, page 5-5](#)
- [Horizon Quantum—Supported Modules, page 5-5](#)

- [Horizon Quantum—Supported Technologies, page 5-6](#)
- [Horizon Quantum—Supported Service Events, page 5-6](#)

Horizon Quantum—Supported Software Versions

Table 5-9 *Supported Software Versions for Horizon Quantum—Cisco ANA Version 3.7.2 and 3.7.3*

Software Version	ANA Version	DP Version
1.1.0	3.7.2/3.7.3	5.0

Horizon Quantum—Supported Topologies

Table 5-10 *Supported Topologies for Horizon Quantum—Cisco ANA Version 3.7.2 and 3.7.3*

Topology Type	Link Type	ANA Version	DP Version
Generic Port	Generic Port ²	3.7.3/3.8	7.0

2. Currently it is supported by using Generic methodology

Horizon Quantum—Supported Modules

Table 5-11 *Supported Modules for Horizon Quantum—Cisco ANA Version 3.7.2 and 3.7.3*

Module Name	ANA Version	Module Description	DP Version
Horizon Quantum	3.7.2/3.7.3	Horizon Quantum is not a modular device. It contains 8 Ethernet ports and 2 wireless ports.	5.0
Horizon Quantum (Radio)	3.7.2/3.7.3	Horizon Quantum is a dummy module that contains the sub modules for Radio properties.	7.0

Horizon Quantum—Supported Technologies

Table 5-12 Supported Service Events for Horizon Compact—Cisco ANA Version 3.7.2 and 3.7.3

Event Name	ANA Version	Expedited	DP Version
Link up	3.7.2/3.7.3	Y	5.0

The following technologies are supported by the Horizon Quantum devices in Cisco ANA Version 3.7.2 and 3.7.3:

- [Ethernet, page 5-7](#)
- [Hardware, page 5-8](#)
- [Serial, page 5-10](#)
- [Generic Port, page 5-10](#)
- [Local Switching, page 5-11](#)

Horizon Quantum—Supported Service Events

Table 5-13 Supported Service Events for Horizon Quantum—Cisco ANA Version 3.7.2 and 3.7.3

Event Name	ANA Version	Expedited	DP Version
Link up	3.7.2/3.7.3	Y	5.0

Supported Technologies on DragonWave Devices

The following sections list the objects and attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

This section contains the following topics:

- [Ethernet, page 5-7](#)
- [Hardware, page 5-8](#)
- [Serial, page 5-10](#)
- [Generic Port, page 5-10](#)
- [Local Switching, page 5-11](#)
- [LLDP, page 5-12](#)

Ethernet

The following table (Table 5-14) lists the ethernet attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-14 Ethernet Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
IMO Name—IEthernet			
MAC Address	Y	Y	Y
Duplex Mode	Y	Y	Y
IANA Type		Y	Y

Ethernet OAM

The following table (Table 5-14) lists the ethernet attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-15 Ethernet OAM Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
IMO Name—IOAMData			
adminState			Y
linkFaultAction			Y
dyingGaspAction			Y
criticalEventAction			Y
mode			Y
unidirectional			Y
linkMonitor			Y
remoteLoopback			Y
portStatus			Y

Table 5-15 Ethernet OAM Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3 (Continued)

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
loopbackStatus			Y
remoteData			Y
name			Y
ethernetPort			Y
IMO Name—IOAMRemoteData			
macAddress			Y
mode			Y
unidirection			Y
linkMonitor			Y
remoteLoopback			Y

Hardware

Table 5-16 lists the hardware attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-16 Hardware Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
IMO Name—IChassis			
Description	Y	Y	Y
Serial Number	Y	Y	Y
IMO Name—IModule			
Module Name	Y	Y	Y
Module Description	Y	Y	Y
Software Version	Y	Y	Y
Hardware Type	Y	Y	

Table 5-16 *Hardware Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3 (Continued)*

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
Hardware Type & Version	Y	Y	Y
Radio Description (Soft Property)		Y	
Radio Oper Status (Soft Property)		Y	
Radio Transmit Power (Soft Property)		Y	
Radio Power Option (Soft Property)		Y	
Radio Actual Transmit Power (Soft Property)		Y	
Antenna1Tilt (Soft Property)		Y	
Antenna2Tilt (Soft Property)		Y	
IMO Name—IManagedElement			
IP Address	Y	Y	Y
Communication State	Y	Y	Y
Investigation State	Y	Y	Y
Element Category	Y	Y	Y
Element Type and Key	Y	Y	Y
Device Name	Y	Y	Y
System Name	Y	Y	Y
System Description	Y	Y	Y
Up Time	Y	Y	Y
Software Version	Y	Y	Y
Vendor Identity	Y	Y	Y
Sys Contact	Y	Y	Y
Sys Location	Y	Y	Y

Serial

Table 5-17 lists the serial attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-17 Serial Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
IMO Name—IPhysicalLayer			
Media Type	Y	Y	Y
Maximum Speed	Y	Y	Y
Is Internal Port		Y	
Administrative Status	Y	Y	Y
Operational Status	Y	Y	Y
IANA Type	Y	Y	Y
Port Alias	Y	Y	Y
Location	Y	Y	Y
Connector Description	Y	Y	Y
Status	Y	Y	Y
Managed	Y	Y	Y

Generic Port

The following table (Table 5-18) lists the generic port attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-18 Generic Port Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
IMO Name—IDataLinkLayer			
Modem Channelized RSL (Soft Property)	Y	Y	Y

Table 5-18 Generic Port Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3 (Continued)

Attribute	Horizon Compact	Horizon Quantum	Horizon Compact Plus
Modem Modulation Type (Soft Property)	Y	Y	Y
ModemSNR (Soft Property)	Y	Y	Y
Modem Eb To Noise Ratio (Soft Property)	Y	Y	Y
ModemRxBlocksOK (soft property)	Y	Y	Y
ModemRxBlocksError (soft property)	Y	Y	Y
Modem Equalizer Stress (Soft Property)	Y		Y
RadioTransmitPower (soft property)	Y		Y
RadioOperStatus (soft property)	Y		Y
RadioTemperature (soft property)	Y		Y
RadioProgrammedAntennaDiameter (soft property)	Y		Y
ModemRxFramesOK (soft property)	Y		Y
ModemRxFramesError (soft property)	Y		Y
Associated Radio		Y	
Associated Radio Index		Y	
RadioDescription (soft property)			Y
RadioActualTransmitPower (soft property)			Y

Local Switching

The following table ([Table 5-19](#)) lists the local switching attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-19 Local Switching Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

Attribute			
	Horizon Compact	Horizon Quantum	Horizon Compact Plus
	IMO Name—ILocalSwitchingEntry		
Local Switching Entry Key	Y	Y	Y
Local Switching Entry Status	Y	Y	Y
Segment 1	Y	Y	Y
Segment 1 Port Name	Y	Y	Y
Segment 1 Status	Y	Y	Y
Segment 2	Y	Y	Y
Segment 2 Port Name	Y	Y	Y
Segment 2 Status	Y	Y	Y

LLDP

The following table ([Table 5-20](#)) lists the LLDP attributes that are supported on DragonWave devices in Cisco ANA Version 3.7.2 and 3.7.3 per technology:

Table 5-20 LLDP Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3

		Horizon Compact Plus
Attribute		
IMO Name—ILLDPService		
Status		Y
LldpAdvertisementsInterval		Y
LldpHoldTime		Y
LldpReinitialisationDelay		Y
LocalChassisID		Y
LocalSystemName		Y
IMO Name—ILLDPNeighbor		
LocalPortName		Y

Table 5-20 *LLDP Attribute Support on DragonWave Devices—Cisco ANA Version 3.7.2 and 3.7.3*

Attribute	Horizon Compact Plus
RemotePortDesc	Y
RemoteChassisId	Y
LocalPortId	Y
RemotePortId	Y
RemoteSystemName	Y

