

## Network Interface Card

The Cloud Services Gateway (CSG) 3000 series appliances offer field-based configurability using the network interface card (NIC) slot. CSG3000 series appliances also support additional NIC options such as ADSL/VDSL NICs, T1/E1 NICs, 8-port GE NICs, and 4-port GE SFP NICs.

Table 1 describes the NICs and the Versa Operating System™ (VOS™) software releases in which the NIC is supported.

**Table 1: CSG3000 Series Appliance NIC Support**

NIC Type and Model	NIC Options	Description	VOS Support
Gigabit Ethernet			
<ul style="list-style-type: none"> <li>NIC-4GP-120</li> </ul>	4-port RJ45 copper Gigabit Ethernet PoE/PoE+, 120 W	<ul style="list-style-type: none"> <li>Support IEEE 802.3af Type 1 PoE and IEEE 802.3at Type 2 Class 4 PoE+ devices 802.3at-2009 over CAT5e.</li> <li>Each port can supply up to 30 W of power, with a maximum of 120 W for the module</li> </ul>	Releases 21.2.1 and later
ADSL+/VDSL			
<ul style="list-style-type: none"> <li>NIC-1VA</li> </ul>	1 RJ45 port ADSL+/VDSL, Annex A	<ul style="list-style-type: none"> <li>Single-port ADSL+/VDSL module that supports Annex A (POTS)</li> </ul>	Releases 21.1.1 and later
<ul style="list-style-type: none"> <li>NIC-1VB</li> </ul>	1 RJ45 port ADSL+/VDSL, Annex B	<ul style="list-style-type: none"> <li>Single-port ADSL+/VDSL module that supports Annex B (ISDN)</li> </ul>	Releases 21.1.1 and later

NIC Type and Model	NIC Options	Description	VOS Support
T1/E1			
<ul style="list-style-type: none"> <li>NIC-4DS</li> </ul>	4 RJ45 ports T1/E1	<ul style="list-style-type: none"> <li>Supports T1/E1 framing</li> <li>Supports all common formats</li> <li>Supports PPP, HDLC, and Frame Relay encapsulations.</li> </ul>	Releases 21.1.1 and later

To supplement the eight built-in PoE+ ports, you can add a 4-port copper Gigabit Ethernet PoE+ NIC, to provide a total of twelve PoE+ ports. CSG3000 series appliances and the optional 4-port PoE+ NIC support the 802.3af and 802.3at standards. Note that an external power supply unit is required for the optional 4-port PoE+ NIC.

## NIC Specifications

Table 2 lists the NIC specifications for a CSG3000 series chassis.

**Table 2: CSG3000 Series NIC Specifications**

Item	Specification
<b>Power Specifications</b>	
Typical power consumption	10 W
System power input	3.3 VDC @3A
PoE power adapter input	54 VDC @ 2.78A, 100-240 VAC @ 2A, 50-60 Hz
<b>Physical Specifications</b>	
Height	1.54" (39 mm)
Width	3.25" (82.5 mm)
Depth	5.52" (140 mm)
Weight	
<ul style="list-style-type: none"> <li>NIC-8GE</li> </ul>	0.33 lb (150 gm)

Item	Specification
• NIC-4GP-120 W	0.44 lb (200 gm)
• NIC-1VA/1VB	0.33 lb(150 gm)
• NIC-4DS	0.44 lb (200 gm)
• NIC-4GF	0.33 lb (150 gm)
<b>Package Specifications</b>	
Height	3.25" (82.55 mm)
Width	6" (152.4 mm)
Depth	9" (228.6 mm)
Weight	0.77 lb (350 gm)
<b>Operating Conditions</b>	
Temperature	0 to 40°C (32 to 104°F)
Humidity	10 to 85% relative humidity
Altitude	Maximum 3000 m (10000 ft)
Noise level	0 dBm
Temperature	–20 to 70°C (–4 to 158°F) at sea level
Humidity	10 to 85% relative humidity
Temperature	0 to 40°C (32 to 104°F)