












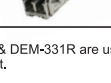


DEM series consists of SFP/XFP modules that can achieve long distance data transmission and high speed communication with single-mode and multi-mode fiber. These modules can be installed into switches and media converters.





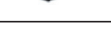

The DEM series¹ product line includes 100M / 1G / 10G and 1 core / 2 core choices.

SFP / XFP Transceivers (Hot-Swappable)

Type	Model	Description
XFP (10GE)	DEM-421XT 	<ul style="list-style-type: none"> Standard : IEEE 802.3ae 10GBASE-SR, MSA • Connector : LC • Wavelength : 850nm Fiber Cable Type : 2 Core Multi-Mode : 50/125µm, 62.5µm • Transmission Distance² : 300m <p>10GBASE-SR 300m 2 Core MMF</p>
	DEM-422XT 	<ul style="list-style-type: none"> Standard : IEEE 802.3ae 10GBASE-LR, MSA • Connector : LC • Wavelength : 1310nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 10km <p>10GBASE-LR 10km 2 Core SMF</p>
	DEM-423XT 	<ul style="list-style-type: none"> Standard : IEEE 802.3ae 10GBASE-ER, MSA • Connector : LC • Wavelength : 1550nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 40km <p>10GBASE-ER 40km 2 Core SMF</p>
WDM Bi-Directional 1 Core SFP (1GE)	DEM-330T ¹ 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1550nm, RX 1310nm Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance² : 10km <p>1000BASE-LX 10km 1 Core SMF</p>
	DEM-330R ¹ 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1310nm, RX 1550nm Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance² : 10km <p>1000BASE-LX 10km 1 Core SMF</p>
	DEM-331T ¹ 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1550nm, RX 1310nm Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance² : 40km <p>1000BASE-LX 40km 1 Core SMF</p>
	DEM-331R ¹ 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : TX 1310nm, RX 1550nm Fiber Cable Type : 1 Core Single-Mode : 9/125µm • Transmission Distance² : 40km <p>1000BASE-LX 40km 1 Core SMF</p>
2 Core SFP (1GE)	DEM-310GT 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LX, MSA • Connector : LC • Wavelength : 1310nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 10km <p>1000BASE-LX 10km 2 Core SMF</p>
	DEM-311GT 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-SX, MSA • Connector : LC • Wavelength : 850nm Fiber Cable Type : 2 Core Multi-Mode : 50/125µm, 62.5/125µm • Transmission Distance² : 550m <p>1000BASE-SX 550m 2 Core MMF</p>
	DEM-312GT2 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-SX2, MSA • Connector : LC • Wavelength : 1310nm Fiber Cable Type : 2 Core Multi-Mode : 62.5/125µm • Transmission Distance² : 2km <p>1000BASE-SX2 2km 2 Core MMF</p>
	DEM-314GT 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-LH, MSA • Connector : LC • Wavelength : 1550nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 50km <p>1000BASE-LH 50km 2 Core SMF</p>
	DEM-315GT 	<ul style="list-style-type: none"> Standard : IEEE 802.3z 1000BASE-ZX, MSA • Connector : LC • Wavelength : 1550nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 80km <p>1000BASE-ZX 80km 2 Core SMF</p>
2 Core SFP (100M)	DEM-210 	<ul style="list-style-type: none"> Standard : IEEE 802.3u 100BASE-FX, MSA • Connector : LC • Wavelength : 1310nm Fiber Cable Type : 2 Core Single-Mode : 9/125µm • Transmission Distance² : 15km <p>100BASE-FX 15km 2 Core SMF</p>
	DEM-211 	<ul style="list-style-type: none"> Standard : IEEE 802.3u 100BASE-FX, MSA • Connector : LC • Wavelength : 1310nm Fiber Cable Type : 2 Core Multi-Mode : 62.5/125µm • Transmission Distance² : 2km <p>100BASE-FX 2km 2 Core MMF</p>

¹ DEM-330T & DEM-330R are used as a pair. DEM-331T & DEM-331R are used as a pair.
² There is loss dispersion when the cable length is different.

Expansion Modules

Type	Model	Description
1 Port 100FX Module	DEM-201F 	<ul style="list-style-type: none"> Standard : IEEE 802.3u 100BASE-FX Connector : SC
1 Port SFP Module	DEM-301G 	<ul style="list-style-type: none"> Standard : IEEE 802.3u 1000BASE-X; IEEE802.3x Flow Control Connector : SFP (Mini-GBIC)
1 Port 1000M Module	DEM-301T 	<ul style="list-style-type: none"> Standard : IEEE 802.3ab 1000BASE-T; IEEE 802.3u 100BASE-TX; IEEE802.3 10BASE-T; IEEE 802.3x Flow Control Connector : RJ-45
1 Port 10GE Module	DEM-410X 	<ul style="list-style-type: none"> Standard : IEEE 802.3ae 10Gigabit Ethernet Connector : XFP
	DEM-410CX 	<ul style="list-style-type: none"> Standard : IEEE 802.3ak 10Gigabit Ethernet Connector : CX4 Special 1M Cable Attached • DEM-CB300CX (use on DEM-410CX) • 3m 

SFP / XFP Transceivers

Module	Switch Series	Switch Model	10G XFP			1G SFP					
			DEM-421XT Multi-Mode SR 300m	DEM-422XT Single-Mode LR 10km	DEM-423XT Single-Mode ER 40km	DEM-330T/R WDM 1 Core LX 10km	DEM-331T/R WDM 1 Core LX 40km	DEM-310GT Single-Mode LX 10km	DEM-311GT Multi-Mode SX 550m	DEM-312GT2 Multi-Mode SX 2km	DEM-314GT Single-Mode LH 50km
Fast Ethernet Web Smart Switches		DES-1228			✓	✓	✓	✓	✓	✓	✓
		DES-1228P			✓	✓	✓	✓	✓	✓	✓
		DES-1252			✓	✓	✓	✓	✓	✓	✓
Gigabit Web Smart Switches		DGS-1216T			✓	✓	✓	✓	✓	✓	✓
		DGS-1224T			✓	✓	✓	✓	✓	✓	✓
		DGS-1248T			✓	✓	✓	✓	✓	✓	✓
Fast Ethernet Entry-Level Switches		DES-3010G			✓	✓	✓	✓	✓	✓	✓
		DES-3026		✓ ^{*1}	✓ ^{*1}	✓ ^{*1}	✓ ^{*1}	✓ ^{*1}	✓ ^{*1}	✓ ^{*1}	✓ ^{*1}
		DES-3028		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3028P		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3052		✓	✓	✓	✓	✓	✓	✓	✓
Gigabit Entry-Level Switches		DES-3052P		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3100-24		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3100-24P		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3100-24TG		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3100-48		✓	✓	✓	✓	✓	✓	✓	✓
Gigabit Entry-Level Switches with Security		DGS-3100-48P		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3200-10		✓	✓	✓	✓	✓	✓	✓	✓
Fast Ethernet xStack L2 Edge Switches		DGS-3200-16		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3528		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3528P		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3552		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3552P		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3526		✓	✓	✓	✓	✓	✓	✓	✓
Gigabit xStack L2 Edge Switches		DES-3526DC		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3550		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3426	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DGS-3426P	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DGS-3427	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
Fast Ethernet xStack L3 Core Switches		DGS-3450	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DES-3828		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3828DC		✓	✓	✓	✓	✓	✓	✓	✓
Gigabit xStack L3 Core Switches		DES-3828P		✓	✓	✓	✓	✓	✓	✓	✓
		DES-3852		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3612		✓	✓	✓	✓	✓	✓	✓	✓
		DGS-3612G		✓	✓	✓	✓	✓	✓	✓	✓
Gigabit & Fast Ethernet L3 Chassis Switches		DGS-3627	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DGS-3627G	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DGS-3650	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	✓
		DES-6500	✓ ^{*3}	✓ ^{*3}	✓ ^{*3}	✓ ^{*5}	✓ ^{*5}	✓ ^{*5}	✓ ^{*5}	✓ ^{*5}	✓ ^{*5}
		DES-7206	✓ ^{*4}	✓ ^{*4}	✓ ^{*4}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}
Unified L3 Switches		DES-7210	✓ ^{*4}	✓ ^{*4}	✓ ^{*4}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}	✓ ^{*6}
		DWS-3024		✓	✓	✓	✓	✓	✓	✓	✓
		DWS-3026	✓ ^{*2}	✓ ^{*2}	✓ ^{*2}	✓	✓	✓	✓	✓	

^{*1} Must use with DEM-301G Module

^{*2} Must use with DEM-410X Module

^{*3} Must use with DES-6512 Module

^{*4} Must use with 7200-2XG or 7200-4XG Module

^{*5} Must use with DES-6507 or DES-6509 Module

^{*6} Must use with 7200-24, 7200-24G, 7200-24P, 7200-48, 7200-48P Module

Module	Switch Series	Switch Model	100FX SFP		Expansion Module				
			DEM-210 Single-Mode 15km	DEM-211 Multi-Mode 2km	DEM-201F 100FX Multi-Mode SC 2km	DEM-301G SFP Slot	DEM-301T 10/100/1000 BASE-T	DEM-410X XFP Slot	DEM-410CX CX4 Slot
Fast Ethernet Web Smart Switches		DES-1228	✓	✓					
		DES-1228P	✓	✓					
		DES-1252	✓	✓					
Fast Ethernet Entry-Level Switches		DES-3026			✓	✓			
		DES-3028	✓	✓					
		DES-3028P	✓	✓					
		DES-3052	✓	✓					
		DES-3052P	✓	✓					
Fast Ethernet xStack L2 Edge Switches		DES-3528	✓	✓					
		DES-3528P	✓	✓					
		DES-3552	✓	✓					
		DES-3552P	✓	✓					
		DGS-3100-24	✓	✓					
Gigabit Entry-Level Switches		DGS-3100-24P	✓	✓					
		DGS-3100-24TG	✓	✓					
		DGS-3100-48	✓	✓					
		DGS-3100-48P	✓	✓					
Gigabit Entry-Level Switches with Security		DGS-3200-10	✓	✓					
		DGS-3200-16	✓	✓					
Gigabit xStack L2 Edge Switches		DGS-3426						✓	✓
		DGS-3426P						✓	✓
		DGS-3427						✓	✓
		DGS-3450						✓	✓
Gigabit xStack L3 Core Switches		DGS-3627						✓	✓
		DGS-3627G						✓	✓
		DGS-3650						✓	✓
Unified L3 Switches		DWS-3026						✓	✓