

OVERVIEW SFP TRANSCEIVERS

Electrical, optical transceivers for services up to 2.5Gbps

OVERVIEW GREY SFP TRANSCEIVERS WITH ETHERNET FOCUS

For detailed technical data, see respective datasheet.

Technology		SFP Transceivers																		
		Grey																		
		SO-SFP-100Base-T	SO-SFP-GE-FE-FX	SO-SFP-GE-FE-LX	SO-SFP-100Base-FXD	SO-SFP-100Base-LXD	SO-SFP-100Base-EXD	SO-SFP-100Base-ZXD	SO-SFP-100Base-L160D	SO-SFP-100Base-L200D	SO-SFP-1000Base-T	SO-SFP-1000Base-TX	SO-SFP-1000Base-TR	SO-SFP-1000Base-SXD	SO-SFP-1000Base-MMXD	SO-SFP-1000Base-LXD	SO-SFP-1000Base-L20D	SO-SFP-1000Base-L40D	SO-SFP-1000Base-ZXD	SO-SFP-1000Base-EZXD
Transm. media	Electrical	x									x	x	x							
	Multimode		x		x								x	x						
	Singlemode			x		x	x	x	x	x						x	x	x	x	x
Channel count	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Typical reach	30m																			
	100m	x									x	x	x							
	220m																			
	1km														x					
	2km		x		x												x			
	10km			x												x				
	15km					x														
	20km																			
	40km						x											x		
	60km																			
	70km																			
	80km								x										x	
	120km																			x
160km									x											
200km										x										
Protocols	Eth	SGMII		x	x							x								
		GbE									x	x	x	x	x	x	x	x	x	x
		FE (100M)	x	x	x	x	x	x	x	x	x			x						
		10M	x									x								
	SDH/SONET	STM-16/OC-48																		
		STM-4/OC-12													x					
		STM-1/OC-3				x	x	x	x	x	x				x					
	SAN	4G FC																		
		1G FC												x	x	x	x	x	x	x
	CPRI	Opt 1 (0.6144 Gbps)													x					
Opt 2 (1.2288 Gbps)														x						
I-temp (-40 to +85°C)											x	x	x	x	x	x	x	x	x	

OVERVIEW GREY SFP TRANSCEIVERS WITH SDH/SONET FOCUS

For detailed technical data, see respective datasheet.

Technology		SFP Transceivers																
		Grey																
		SO-SFP-155M-L2D	SO-SFP-155M-L15D	SO-SFP-155M-L40D	SO-SFP-155M-L80D	SO-SFP-155M-L160D	SO-SFP-155M-L200D	SO-SFP-622M-L2D	SO-SFP-622M-L15D	SO-SFP-622M-L40D	SO-SFP-622M-L80D	SO-SFP-622M-L120D	SO-SFP-622M-L160D	SO-SFP-MR2D	SO-SFP-MR15D	SO-SFP-MR40D	SO-SFP-MR80D	
Transm. media	Electrical																	
	Multimode							x										
	Singlemode	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	
Channel count	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Typical reach	30m																	
	100m																	
	220m																	
	1km																	
	2km	x						x						x				
	10km																	
	15km		x						x						x			
	20km																	
	40km			x						x							x	
	60km																	
	70km				x													
	80km										x							x
	120km											x						
160km					x							x						
200km						x												
Protocols	Eth	GbE												x	x	x	x	
		FE (100M)	x	x	x	x	x	x	x	x	x	x	x					
	SDH/SONET	STM-16/OC-48													x	x	x	x
		STM-4/OC-12							x	x	x	x	x	x	x	x	x	x
		STM-1/OC-3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	OTN	OTU1												x	x	x	x	
	SAN	2G FC													x	x	x	x
		1G FC													x	x	x	x
	CPRI	Opt 1 (0.6144 Gbps)													x	x	x	x
		Opt 2 (1.2288 Gbps)													x	x	x	x
		Opt 3 (2.4576 Gbps)													x	x	x	x
	OBSAI	1x (0.768 Gbps)													x	x	x	x
		2x (1.536 Gbps)													x	x	x	x
I-temp (-40 to +85°C)																		

OVERVIEW CWDM SFP TRANSCEIVERS WITH ETHERNET & SDH/SONET FOCUS

For detailed technical data, see respective datasheet.

Technology		SFP Transceivers																								
		CWDM																								
Part number		SO-SFP-100Base-L80D-Cxx	SO-SFP-100Base-L160D-Cxx	SO-SFP-100Base-L200D-Cxx	SO-SFP-150D-Cxx	SO-SFP-L80D-Cxx	SO-SFP-L120D-Cxx	SO-SFP-L160D-Cxx	SO-SFP-L160DH-Cxx	SO-SFP-L210D-Cxx	SO-SFP-155M-L80D-Cxx	SO-SFP-155M-L160D-Cxx	SO-SFP-155M-L160DH-Cxx	SO-SFP-155M-L200D-Cxx	SO-SFP-155M-L260D-Cxx	SO-SFP-155M-L270D-Cxx-FMC	SO-SFP-622M-L40D-Cxx	SO-SFP-622M-L80D-Cxx	SO-SFP-622M-L120D-Cxx	SO-SFP-622M-L120DH-Cxx	SO-SFP-622M-L160D-Cxx	SO-SFP-MR50D-Cxx	SO-SFP-MR80D-Cxx	SO-SFP-MR120D-Cxx		
Transm. media	Electrical																									
	Multimode																									
	Singlemode	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Channel count	1																									
	8	x	x	x																						
	9																			x						
	18				x	x	x	x	x	x	x	x	x										x	x	x	
	40																									
Typical reach	10km																									
	15km																									
	20km																									
	40km																	x								
	50km				x																		x			
	70km																									
	80km	x				x					x								x					x		
	120km						x													x	x				x	
	160km		x					x	x			x	x									x				
	200km			x										x												
	210km									x																
	260km														x											
270km															x											
Protocols	Eth	GbE				x	x	x	x	x	x												x	x	x	
		FE (100M)	x	x	x							x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		10M																								
	SDH/SONET	STM-16/OC-48																					x	x	x	
		STM-4/OC-12																	x	x	x	x	x	x	x	
	SAN	2G FC	x	x	x							x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		1G FC				x	x	x	x	x	x													x	x	x
	CPRI	Opt 1 (0.6144 Gbps)																						x	x	x
		Opt 2 (1.2288 Gbps)																						x	x	x
		Opt 3 (2.4576 Gbps)																						x	x	x
	OBSAI	1x (0.768 Gbps)																						x	x	x
		2x (1.536 Gbps)																						x	x	x
I-temp (-40 to +85°C)																										
E-temp (-20 to +85°C)					x	x	x	x	x																	

OVERVIEW DWDM SFP TRANSCEIVERS WITH ETHERNET & SDH/SONET FOCUS

For detailed technical data, see respective datasheet.

Technology		SFP Transceivers										
		DWDM										
		SO-SFP-L80D-Dxxx	SO-SFP-L120D-Dxxx	SO-SFP-L120DH-Dxxx	SO-SFP-L80D-50G-Dxxxx	SO-SFP-L120D-50G-Dxxxx	SO-SFP-MR50D-Dxxxx	SO-SFP-MR80D-Dxxxx	SO-SFP-MR120D-Dxxxx	SO-SFP-MR50D-50G-Dxxxx	SO-SFP-MR80D-50G-Dxxxx	SO-SFP-MR120D-50G-Dxxxx
Transm. media	Electrical											
	Multimode											
	Singlemode	x	x	x	x	x	x	x	x	x	x	
Channel count	40 (100GHz grid)						x	x	x			
	42 (100GHz grid)	x	x	x								
	80 (50GHz grid)				x	x				x	x	
Typical reach	10km											
	15km											
	20km											
	40km											
	50km						x			x		
	70km											
	80km	x			x			x			x	
	120km		x	x		x			x		x	
	160km											
	200km											
210km												
Protocols	Eth	GbE	x	x	x	x	x	x	x	x	x	x
		FE (100M)	x	x	x	x	x	x	x	x	x	x
		10M										
	SDH/SONET	STM-16/OC-48						x	x	x	x	x
		STM-4/OC-12	x	x	x	x	x	x	x	x	x	x
		STM-1/OC-3	x	x	x	x	x	x	x	x	x	x
	OTN	OTU1								x	x	x
	SAN	2G FC						x	x	x	x	x
		1G FC	x	x	x	x	x	x	x	x	x	x
	CPRI	Opt 1 (0.6144 Gbps)	x	x	x	x	x	x	x	x	x	x
		Opt 2 (1.2288 Gbps)	x	x	x	x	x	x	x	x	x	x
		Opt 3 (2.4576 Gbps)						x	x	x	x	x
OBSAI	1x (0.768 Gbps)	x	x	x	x	x	x	x	x	x	x	
	2x (1.536 Gbps)						x	x	x	x	x	
E-temp (-20 to +75°C)		x	x									

OVERVIEW BIDI TRANSCEIVERS WITH ETHERNET & SDH/SONET FOCUS

For detailed technical data, see respective datasheet.

Technology		SFP Transceivers															CSFP							
		BiDi																						
Part number		SO-SFP-GE-FE-BX20D-35/53	SO-SFP-100Base-BX20D-35/53	SO-SFP-100Base-BX40D-35/53	SO-SFP-100Base-BX20D-34/43	SO-SFP-1000Base-BX-MIMD-35/53	SO-SFP-1000Base-BX10D-35/53	SO-SFP-1000Base-BX20D-35/53	SO-SFP-1000Base-BX40D-35/53	SO-SFP-1000Base-BX60D-35/53	SO-SFP-1000Base-BX10D-34/43	SO-SFP-1000Base-BX20D-34/43	SO-SFP-1000Base-BX40D-34/43	SO-SFP-1000Base-BX60D-34/43	SO-SFP-1000Base-BX80D-5157/5751	SO-SFP-1000Base-BX160D-5157/5751	SO-SFP-MR25-BX40D-35/53	SO-SFP-MR25-BX20D-34/43	SO-CSFP-1000Base-BX10D-53-O2	SO-CSFP-1000Base-BX20D-53-O2	SO-CSFP-1000Base-BX10D-43-O2	SO-CSFP-1000Base-BX20D-43-O2		
Transm. media	Electrical																							
	Multimode					x																		
	Singlemode	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Channel count	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Typical reach	< 20																							
	30m																							
	100m																							
	220m																							
	1km					x																		
	2km																							
	10km						x				x								x		x			
	15km																							
	20km		x		x			x				x						x		x			x	
	40km			x									x					x						
	60km									x				x										
	70km																							
	80km														x									
	120km															x								
	160km																							
200km																								
Protocols	Eth	GbE				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		FE (100M)	x	x	x						x	x	x	x	x	x	x	x	x	x	x	x	x	
		10M																						
	SDH/SONET	STM-16/OC-48																x	x					
		STM-4/OC-12																x	x	x	x	x	x	x
		STM-1/OC-3	x	x	x													x	x	x	x	x	x	x
	SAN	2G FC																x	x					
		1G FC					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	CPRI	Opt 1 (0.6144 Gbps)																x	x					
		Opt 2 (1.2288 Gbps)					x											x	x					
		Opt 3 (2.4576 Gbps)																x	x					
	OBSAI	1x (0.768 Gbps)																x	x					
		2x (1.536 Gbps)																x	x					
		4x (3.0720 Gbps)																						
		8x (6.1440 Gbps)																						
I-temp (-40 to +85°C)						x	x	x	x	x	x	x	x				x		x	x	x	x	x	
E-temp (-20 to +85°C)															x	x								

DEFINITIONS

Transm. Media:	Type of transmission media. Electrical: Connection is made over LAN cable or coax cable. Multimode: Connection is made over multimode fiber cable. Singlemode: Connection is made over singlemode fiber cable.
Channel count:	Number of services carried. Client to client connections are typically 1 channel. For CWDM and DWDM transceivers the number indicates number of available wavelength versions.
Cable type:	Ribbon-fiber: Optical cable with multiple fibers and MPO (Multi-fiber Push On) connectors. Fiber-pair: One fiber used for transmit and one fiber for receive direction. Single-fiber: One fiber used for both transmit and receive direction. Breakout cable: Special cable to separate individual flows contained in one connector to individual connectors. Can be optical or electrical.
Connector:	Optical transceivers have one or two optical connectors, e.g. LC. Cable solutions have connectors of a transceiver form-factor, e.g. SFP+.
Typical reach:	The nominal bridgeable distance. For optical transceivers the value is without optical path penalties, e.g. chromatic dispersion. For cable solutions where multiple distance options exist, the given distance is the max length.
Protocols:	Protocols supported by the transceiver/cable.
i/f standards:	Indicates if a product complies with an interface standard.
I-temp:	The product is available in a version that supports the Industrial temperature range (-40 to +85°C). The normal temperature range is 0 to +70°C.
E-temp:	The product is available in a version that supports extended temperature range. There is no standard for the supported temperature range. The normal temperature range is 0 to +70°C.
FEC required:	Some protocols require Forward Error Correction to provide transmission with required quality. This is an informative remark since this is stipulated in the respective standards.
DAC:	Direct Attach Cable (coax). Can be active (ACU in item number) or passive (PCU in item number).
AOC:	Active Optical Cable (fiber). AOC in item number.