

Optical Transceiver: 400G QSFP-DD DCO

The 100G/200G/400G QSFP-DD DCO coherent pluggable optical transceiver from Sintai Communication is based on DP-QPSK or DP-8QAM / DP-16QAM design, supports extended C-Band full-band tunable, and is designed to support single wavelength DWDM transmissions of 100G/200G/400Gbps and above, and is applicable for data center 100G/200G/400G Ethernet links.

Features

- Support 100G, 200G, 400G programmable
- DP-QPSK, DP-8QAM / DP-16QAM modulation modes
- Support 191.275~196.125THz frequency adjustable
- Support flexible client interfaces: 100/200/400GbE
- 400GAUI-8, 200GAUI-4, 100GAUI-2 and CAUI-4 Compatible
- Built-in line-side OTN processing
- Support local and remote data loopback
- QSFP-DD MSA compliant
- Hot swap electrical package interface
- Low latency SD-FEC
- Optimized DSP algorithms
- Dual LC optical interfaces
- Supply voltage: 3.3V
- Operating temperature: 15°C to +75°C
- Ultra-low power consumption: 23.6W
- RoHS-6 compliant (lead-free)



Application areas

- Metro DCI Interconnect
- DWDM long distance transmission

Parameter		Min.	Typical	Max.	Unit
Operating frequency range		191.275		196.125	THz
Operating frequency accuracy		-1.5		+1.5	GHz
Transmit optical power range	100G QPSK	-6	-4	-2	dBm
	200G QPSK	-10.5	-8.5	-6.5	
	200G 8QAM	-11	-9	-7	
	200G 16QAM	-10	-8	-6	
	400G 16QAM	-13	-11	-9	
Received optical power range (ROSNR>36dB)	100G QPSK	-32		0	dBm
	200G QPSK	-29		0	
	200G 8QAM	-28		0	
	200G 16QAM	-24		0	
	400G 16QAM	-21		0	
OSNR sensitivity (EOL)	100G QPSK	11.8			dB/0.1nm
	200G QPSK	15			
	200G 8QAM	17.4			
	200G 16QAM	19.3			
	400G 16QAM	23.1			
dispersion tolerance	100G QPSK			80000	ps/nm
	200G QPSK			50000	
	200G 8QAM			26000	
	200G 16QAM			21000	
	400G 16QAM			13,000	
differential group delay	100G			80	ps
	200G			60	
	400G			60	
Cold start time				120	s
Transmit wavelength switching time				200	s