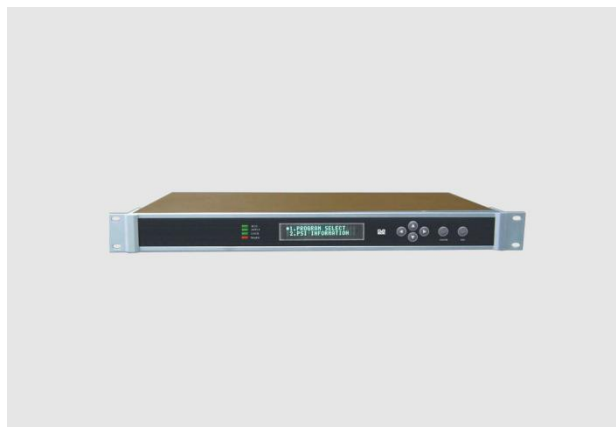


OD2000 TS stream optical transceiver

PRODUCT DESCRIPTION

OD2000 digital fiber transmission system is designed and produced specially for long transmission and network construction of DVB DTV TS stream. OD2000 can modulate the MTS program signal (coming from the 1~8 ways separate multiplexer at the head-end generator room) to FMTS optical signal high-speed code stream. It is an important device to transmit TS stream between DTV head-ends.

OD2000 adopts CWDM or DWDM to realize multi-channel MTS stream transmission, which is featured with full transparent, no loss, good quality, and excellent reliability.



PRODUCT FEATURES

- ▶ Pure digital procedure, full-transparent transmission.
- ▶ Follow SMPTE259M standard, support DVD-ASI(270Mb/s).
- ▶ Compatible HDTV high definition DTV signal.
- ▶ Flexible network construction, point to point, point to multi-point (star/tree structure).
- ▶ Long distance transmission. When point to point and no relay, it can transmit for 80km. When there is multi-relay, it can reach thousands of kilometers.

MAIN APPLICATION

- ▶ Transmission and switch of DVB-TS code stream signal between CATV head-end s generator room.
- ▶ Transmission and switch of digital program between CATV center bureau and each sub-bureau.
- ▶ Transmission of digital program at CATV station, program making and broadcasting center.

TECHNICAL INDEX

Parameter			Index
Optic feature	Operating wavelength	(nm)	1310nm, 1550 nm
	Transmission speed	(Mb/s)	ASI (27 Mb/s)
			SDI (143~540Mb/s)
	Output optical power	(dBm)	20Km(-15~-8dBm, 1310 nm)
			40Km(-5~0dBm, 1310 nm)
			60Km(-3~2dBm, 1550 nm)
	Receive sensitivity	(dBm)	≥-22
	Optical connector		SC/APC, SC/PC
	Optical return loss	(dB)	≥50dB
Interface feature	Interface		SDI, conformity with SMPTE259M
			ASI, conformity with EN50083-9
	Connector		BNC
	Input/output impedance	(Ω)	75
	Input/output return loss	(dB)	≥16dB@270MHz
	Input cable equalization	(M)	0-2700M(Belden8281)
	Input signal range	(mV)	800±80
	Output signal amplitude	(mV)	800±80
	Output rise/fall time	(ps)	400~700ps
	Output rise/fall overshooting	(%)	≤5
General feature	Power supply	(V)	90~265 city power
	Power consumption	(W)	≤10
	Work temp.	(°C)	-5~50
	Store temp.	(°C)	-40~85
	Work humidity	(%)	5~95

PRODUCT SERIES

Model		Function
OD2101	1 channel TS stream Optical transmitter	Transfer MPEG-2/DVBdigital TS (coming from the multiplexes and coder) to the remote after modulated.
OD2201	1 channel TS stream Optical receiver	Receiving FMTS optical signal which is transmitted from OD2101Tx, recover to electric signal, through ASI interface as output.
OD2301	1 channel TS stream transceiver	Receiving FMTS optical signal which is transmitted from OD2101Tx, recover to 1 way ASI interface as output, meantime, the former digital signal from the ASI interface will be transferred to remote after modulated.
OD2401	Single fiber Bi-direction per channel TS stream Optical transceiver	Adopting wavelength multiplexing, transfer 1 way TS that is coming from the multiplexes or coder to remote after modulated through one fiber, meantime, receiving 1 way FMTS optical signal coming from the remote OD2201T/R and recover it to electronic signal as output through ASI interface.
OD2102	2 channel TS stream Optical transmitter	Two-way MPEG-2/DVB digital TS transmit stream (outputted by double route multiplexes or encoder), Send to remote end by one optical fiber through WDM, (after modulated by laser).
OD2202	2 channel TS stream Optical receiver	Through demultiplex, Optical signal (Sent from OD2102Tx)can be recovered to two-way MPEG-2/DVB digital TS transmit stream electric signal, then output by two-way ASI serial port.
OD2104	4 channel TS stream Optical transmitter	Four-way TS transmit stream(outputted by Four-way multiplex or coder) can be sent to remote end by one optical fiber through WDM after laser's modulate.
OD2204	4 channel TS stream Optical receiver	Through demultiplex, Optical signal (Sent from OD2104Tx)can be recovered to four-way MPEG-2/DVB digital TS transmit stream electric signal, then output by four-way ASI serial port.
OD2106	6 channel TS stream Optical transmitter	Six-way MPEG-2/DVB digital TS transmit stream (outputted by six-way multiplexes or encoder), Send to remote end by one optical fiber through WDM, (after modulated by laser).
OD2206	6 channel TS stream Optical receiver	Through demultiplex optical signal(sent from OD2106Tx)can be recovered to six-way electric signal and then output by six-way ASI serial port.
OD2108	8 channel TS stream Optical transmitter	Eight-way TS transmit stream (outputted by eight-way multiplexes or coder)can be sent to remote end by one optical fiber through WDM after laser's modulate.
OD2208	8 channel TS stream Optical receiver	Digital optical signal (sent by OD2108Tx), recover to eight-way electric signal through demultiplex, and then output by eight-way serial port.
OD2604	One divides into four code stream dispatcher	One-way TS code stream divide into four way TS code stream output, multi-way code stream output and input code stream are identical.
OD2608	One divides into eight code stream dispatcher	One-way TS code stream divide into eight-way TS code stream output, multi-way code stream output and input code stream are identical.

OD2510	DWDM power amplifier	1550nmDWDM power amplifier, used in optical transmit port or after DWDM, to enlarge transmit power supply, -20 ~ +10dBm input optical power, 10 ~ 17dBm output optical power.
OD2520	DWDM line amplifier	1550nm DWDM circuit amplifier,used in compensated line's loss. -26 ~ +10dBm Input optical power, 17dBm output.
OD2530	DWDM preamplifier	1550nm DWDM preposing amplifier, used in demultiplex or before Optical receiver to improve receive sensitivity, -32 ~ 0dBm input optical power, 10~17dBm output optical power.

Remarks: The maximum input data rate of per channel: 270Mb/s.

Input support MTS package outburst mode.

MODEL EXPLANATION

