OD3000B

Digital video/audio/data optical transceiver

PRODUCT DESCRIPTION

OD3000B digital series optical transceiver, adopts digital video coding technique and WDM technique to satisfied user's multipath digital video, audio, data, ethernet's long distant high quality optical fiber transmission because of its full-found. This model of optical transceiver including single fiber one way digital video, single fiber 64 routes video, 128 routes audio and data uni-direction and bi-direction complication.

OD3000B optical transceiver can transmit the camera audio/video signal, camera and tripod head control data as well as other control function to central control room from remote end by optical fiber. It can be widely used in the remote monitoring, video conference, video medical, remote education and other systems of public road, traffic, industrial and mining, community ect.

PRODUCT FEATURES

▶ Adopt 10Bit digital video coding, can reach the transmission quality of secondary broadcast video/audio.

▶ Automatically compatible PAL/NTSC/SECAM video mode.

▶ No cross interference of analog frequency modulated/amplitude modulated optical transceiver.

▶ 24 digit PCM digital audio coding.

▶ Data supports the interface of RS-232, RS-422, RS-485, Manchester, power switch signal, 10~100M Ethernet and so on. Besides, it has main data communication protocol.

▶ Multi-mode 0-5Km.

 Single mode:0-20Km, 0-40 Km, 0-60 Km, 0-80 Km, 0-100Km.

▶ 0Km application, unsaturated and no need to modulate

▶ Support cascade type self-heal circle net function.

▶ Third grade anti-thunder technique.

▶ Flexible network construction, module cassette chassis, independent structure or standard 1U casing optional.

MAIN APPLICATION

▶ Video, audio transmission system of CATV.

▶ Highway, traffic monitor, and communicate system.

▶ City community intelligent monitoring, communicate system.

▶ Market, industrial and mining area, electronic safety monitor system.

▶ Military communicate system.

▶ Campus network, video conference, medical treatment video system.

STATUS INDICATOR

▶POWER --- Lighten when power turn on

▶LOCK --- Receiving lock indicator, lighten when establishing the correct link with transmit leg, to show receiving data

▶DATA --- Data indicator light twinkles when the serial data level used for communications change

▶LINK --- Lighten when IP network connects in the right way.

▶SPD --- IP network communications rate, 100M --- lighten, 10M --- extinguish

▶DUP --- FDX --- lighten, semiduplex --- extinguish

TECHNICAL INDEX

Parameter			Index
Video feature	Coding	(Bit)	10
	Sampling frequency	(MHz)	15.36
	Band width	(MHz)	8
	DG	(%)	<1 (Max)
	DP	(°)	<1 (Max)
			≤0.5 (Typical)
	FT	(%)	<0.5 (Max)
	SNR	(dB)	>67 (weighing)
	Input/output resistance	(Ω)	75 (Disequilibria)
	Input/output level		1.0Vp-p
	Video port		BNC
Audio feature	Sampling frequency	(KHz)	52.3
	Frequency response	(Hz)	10~20K
	Coding	(Bit)	24
	SNR	(dB)	>85
	Audio input/output resistance	(Ω)	600, 10K, 47K disequilibria(equilibrium)
	Nonlinear distortion	(%)	<1, (1KHz)
Data feature	Physical interface		Shield surpass 5type RJ45
	Data direction		Forward/reverse /Bi -direction
	Data form		RS232/RS422/RS485/Manchester
	Rate	(Kbps)	0 ~ 256

	Physical interface		SC/UPC, SC/APC, FC/UPC, FC/APC, ST/PC
Optic feature	Optical fiber type	(μm)	Single mode: 9/125
			Multi-mode: 62.5/125
	Wavelength	(nm)	Single mode: 1310/1550
			Multi-mode: 850/1300
	Receiver sensitivity	(dBm)	-35(1 route video series)
			-28(more than 2 route audio system)
	Optical link	(dB)	≤25 (1 route audio)
General feature	Power supply	(V)	90~265 city power
	Work temperature	(℃)	-40 ~ +65
	Storage temperature	(℃)	-40 ~ +85
	Work humidity	(%)	0 ~95 (uncondensation)
	Mean-time-to double failure		>100,000 hours
	Size, weight		1U: 482(W)×280mm(L)×44mm(H), ≤3Kg
			5U: 482(W)×242mm(L)×222mm(H), ≤8Kg
			at most 16 slot, 64 route video
	Module insert card type		222nm(W)×210nm(D)×28nm(H)(1 slot), ≤1Kg
			222nm(W)×210nm(D)×51nm(H)(2 slot), ≤1.5Kg

MODEL EXPLANATION

OD3 ☐☐ ☐B – ☐ – V☐A☐ ST☐R☐ – L

Digital video/ audio/data/ Ethernet optical transceiver	Kilometer		Power supply		Product type		Channels of video		Channels of audio		Channels of optical transmitter		Channels of optical receiver		LAN	
	02	20Km	2	220V	T	Transmitter	1	1 channel	2	2 channels	0	No	0	No	L	LAN
	04	40Km	1	110V	R	Receiver	2	2 channels	4	4 channels	1	1 channels	1	1 channels	0	Without
	06	60Km					4	4 channels	6	6 channels	2	2 channels	2	2 channels		
	08	80Km					6	6 channels	12	12 channels	3	3 channels	3	3 channels		
	10	100Km					8	8 channels	16	16 channels	4	4 channels	4	4 channels		
	12	120Km														