

KODT2200/2200B

Multi-Serial to Optical Fiber Terminals

CE, FCC, RoHS
Chinese State Grid Certification**Overview**

The KODT series is specially designed for industrial application by KYLAND. It comes as the combination of serial data transmission, Ethernet and optical technology and communication for industrial process control.

Features

1. Flexible network topologies: chain, ring, star ring, KODT2200B also supports tangent ring
2. Dual fiber redundant technology, recovery time < 20ms
3. Serial ports: RS232/RS422/RS485
4. Serial port supports 15KV ESD protection circuit
5. Alarm output for the failure of fiber ports
6. Dual master stations backup function
7. 8 full duplex data channels, 8 x 8 data cross-connection
8. Bus control arbitration
9. Level conversion function for data interface
10. Kyvision management software
11. Abundant power supply options
12. Operating temperature: -40 to 85°C (-40 to 185°F)
13. Wall mounting and rack mounting
14. IP30 protection class

Technical Specifications**Standard**

RS232/RS422/RS485 standard

Interface

Fiber Ports: 2 fiber ports, FC/SC/ST (KODT2200); 4 fiber ports, FC/SC/ST (KODT2200B)

Serial Ports:

Bit Error Rate: $\leq 10^{-10}$

Asynchronous rate: 0-115.2Kbps (Adaptive)

Electric characteristics: comply with standard RS232/RS422/RS485

Physical interface: DB25-hole

Quantity of serial ports: 6 (KODT2200), 12 (KODT2200B)

CONSOLE Interface: RS232, RJ11

LED Indicators: RUN, ORDA, ORDB, RXD1-RXD4 (KODT2200);

RUN, ORDA-ORDD, TX1-TX8, RX1-RX8 (KODT2200B)

Network

Ring, chain, star and tangent ring (KODT2200B) network topology

Cable

Serial Cable: 15m for RS232; 1200m for RS422/485

Twisted Pair: 0-100m

Multi Mode Fiber: 1310nm, 0-5km (100Mbps)

Single Mode Fiber: 1310nm, 0-40km; 1550nm, 0-80km

Power Requirements

Power input: 12VDC (9-18VDC), 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC (66-154VDC), 220VAC/DC (165-265VAC/220-370VDC), single power input

Power terminal: 3-Pin 3.81mm-spacing plug-in terminal block, 3-Pin AC socket

Power consumption: < 2W (KODT2200), < 3W (KODT2200B)

Physical Characteristics

Protection class: IP30, fanless

Installation: Wall mounting (KODT2200), 19 inch 1U rack mounting (KODT2200B)

Dimensions (WxHxD):

129x28x158mm (5.04x1.10x6.22 in.) (KODT2200)

482.6x44x139.7mm (19x1.73x5.5 in.) (KODT2200B)

Weight: 0.6kg (1.323 pound) (KODT2200), 1.5kg (3.307 pound) (KODT2200B)

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 0 to 95% (non-condensing)

ApprovalsIEC61000-4-2 (ESD): ± 4 KV contact discharge, ± 8 KV air discharge

IEC61000-4-3 (RS): 10V/M (80-1000MHz)

IEC61000-4-4 (EFT): power line ± 2 KV, data line ± 1 KVIEC61000-4-5 (Surge): power line ± 2 KV CM/ ± 1 KV DM, data line ± 1 KV

IEC61000-4-6 (CS): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHZ)

IEC61000-4-8 (Power frequency magnetic field): 100A/m cont. 1000A/m, 1s to 3s

IEC61000-4-12/18 (Damped oscillatory wave): 2.5KV CM, 1KV DM

IEC61000-4-10 (Damped oscillatory): 30A/m

IEC61000-4-16 (Common mode conduct): 30V cont. 300V, 1s

FCC CFR47 Part 15/EN55022: Class A&B

IEC61000-6-2 (Industrial Standards), EN50121-4 (Railway Applications)

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MTBF

35 years

Warranty

5 Years

Order Codes

KODT2200 - - - - -
M FX Connector Distance PS

M: Mounting

B= Rack mounting
None= Wall mounting

FX: Fiber Ports

2M=2 multi mode fiber ports
2S= 2 single mode fiber ports
4M=4 multimode fiber ports
4S= 4 single mode fiber ports

Connector: Fiber Connector

FC= FC connector
SC= SC connector
ST= ST connector
SD= single fiber bi-direction, only for single mode, only SC connector (different price)

Distance: Fiber Distance

2= multi mode, 850nm, 2km
5 (or None)= multi mode, 1310nm, 5km (multi mode default)
40 (or None)= single mode, 1310nm, 40km (single mode default)
60= single mode, 1310nm, 60km (different price)
60L= single mode, 1550nm, 60km (different price)
80L= single mode, 1550nm, 80km (different price)
5T3R= single fiber bi-direction, 1550T/1310R, 20km (different price)
5R3T= single fiber bi-direction, 1550R/1310T, 20km (different price)
40/5T3R= single fiber bi-direction, 1550T/1310R, 40km (different price)
40/5R3T= single fiber bi-direction, 1550R/1310T, 40km (different price)
80/5T3R= single fiber bi-direction, 1550T/1310R, 80km (different price)
80/5R3T= single fiber bi-direction, 1550R/1310T, 80km (different price)

PS: Power Supply

12= 12VDC (9-18VDC), single power input
24= 24VDC (18-36VDC), single power input
48= 48VDC (36-72VDC), single power input
110= 110VDC (66-154VDC), single power input
220A= 220VAC/DC (165-265VAC/220-370VDC), single power input

Example order codes

KODT2200B-4M-SC-12
Rack mounting, 4 multi mode 1310nm 5km fiber ports with SC connector, 12VDC single power input