KYLAND
Industrializing the Ethernet
Simplifying Industrial Communication

KODT2200/2200B
Multi-Serial to Optical Fiber Terminals

Version: 100528

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. Serical 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℃ (-40 to 185°F)
13. Wall mounting and rack mouting
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: <=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
Serical 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℃ (-40 to 185°F)
Storage Temperature: -40 to 85℃ (-40 to 185°F)
Ambient Relative Humidity: 0 to 95% (non-condensing)

Approvals
IEC61000-4-2 (ESD): ±4KV contact discharge, ±8KV air discharge
IEC61000-4-3 (RS): 10V/M (80-1000MHz)
IEC61000-4-4 (EFT): power line ±2KV, data line ±1KV
IEC61000-4-5 (Surge): power line ±2KV CM/±1KV DM, data line ±1KV
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)
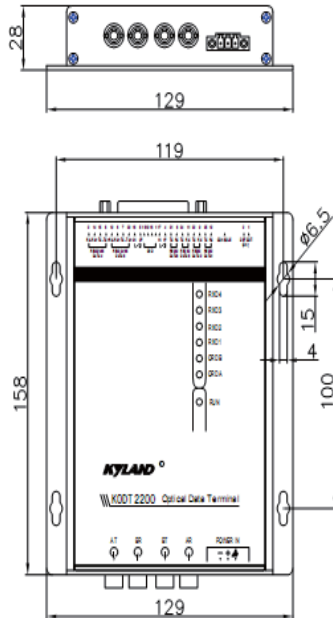
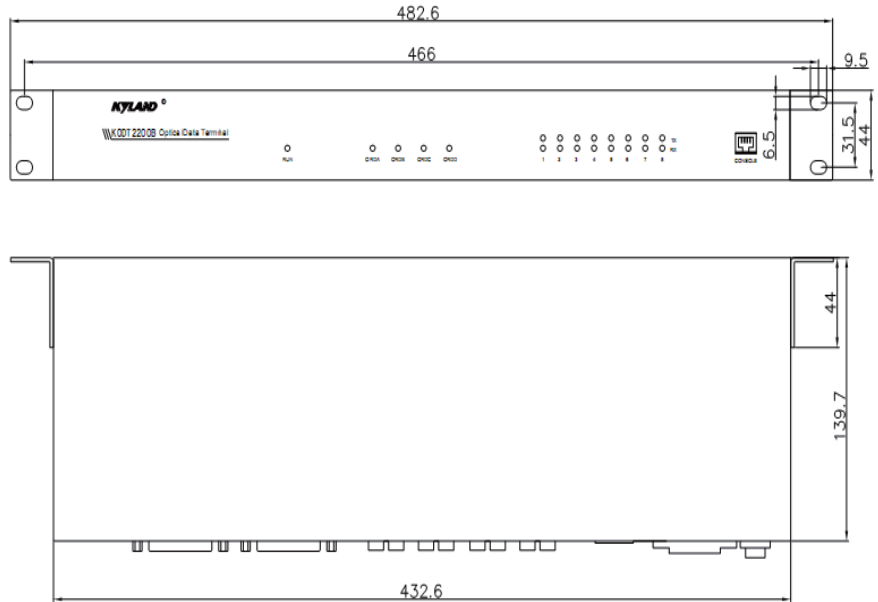CE, FCC, RoHS, Chinese State Grid Certification

MTBF
35 years

Warranty
5 Years

Mechanical Drawing

KODT2200

KODT2200B

Ordering Information

Model	Description
KODT2200-2S	Multi-serial to optical fiber terminal with 2 pairs of fiber ports, single mode, FC/SC/ST connector, 4 RS232 serial ports, 2 RS422/485 serial ports, wall mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature
KODT2200-2M	Multi-serial to optical fiber terminal with 2 pairs of fiber ports, multi mode, FC/SC/ST connector, 4 RS232 serial ports, 2 RS422/485 serial ports, wall mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature
KODT2200B-2S	Multi-serial to optical fiber terminal with 2 pairs of fiber ports, single mode, FC/SC/ST connector, 8 RS232 serial ports, 4 RS422/485 serial pors, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature
KODT2200B-2M	Multi-serial to optical fiber terminal with 2 pairs of fiber ports, multi mode, FC/SC/ST connector, 8 RS232 serial ports, 4 RS422/485 serial ports, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature
KODT2200B-4S	Multi-serial to optical fiber terminal with 4 pairs of fiber ports, single mode, FC/SC/ST connector, 8 RS232 serial ports, 4 RS422/485 serial pors, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature
KODT2200B-4M	Multi-serial to optical fiber terminal with 4 pairs of fiber ports, multi mode, FC/SC/ST connector, 8 RS232 serial ports, 4 RS422/485 serial ports, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input, -40 to 85℃ operating temperature

Power supply: 12VDC, 24VDC, 48VDC, 110VDC, 220VAC/220VDC, single power input

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