

Wiring

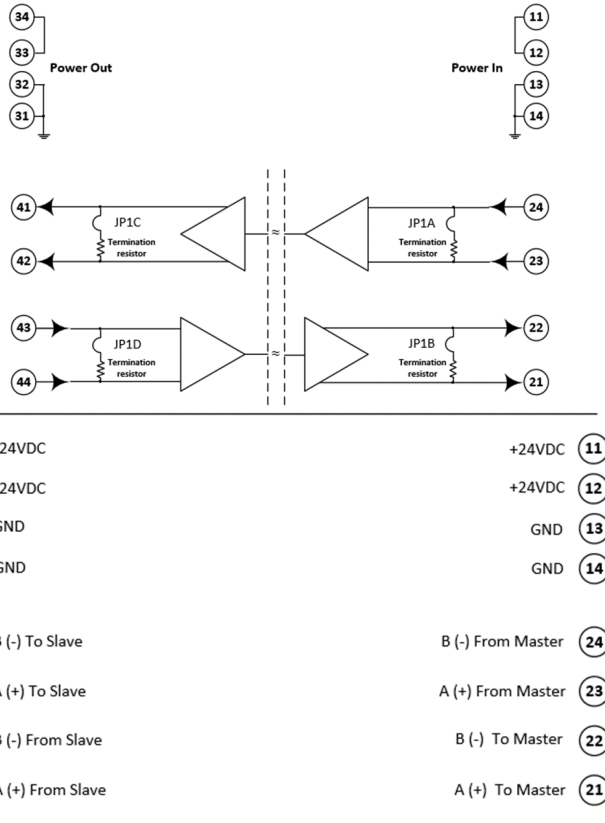


Figure 3: Connection description

*The jumpers (JP1A, JP1B, JP1C, JP1D) in the figure 3 are optional.



Figure 4: Pinout

Dimensions

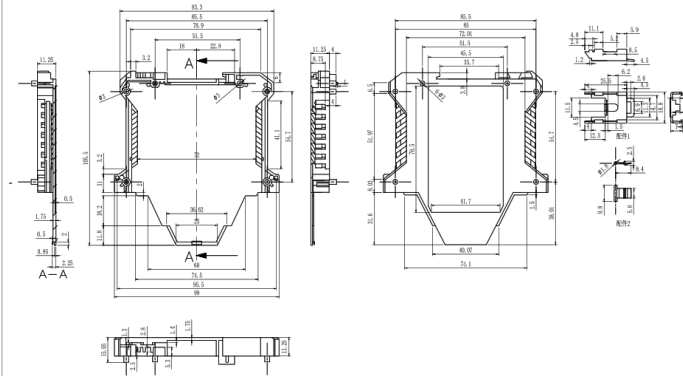
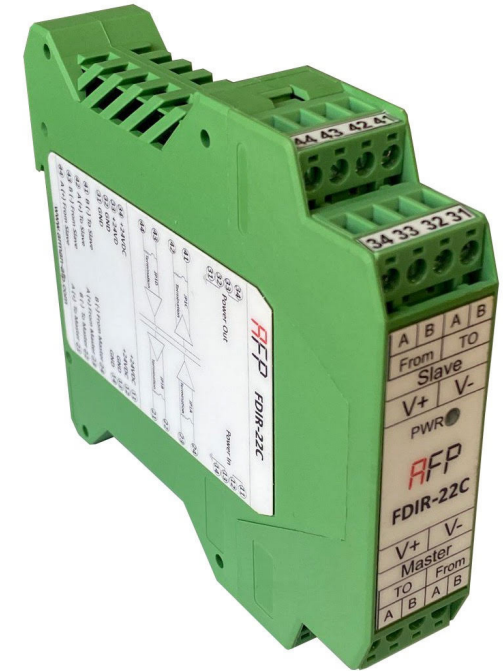


Figure 5: Case dimensions

RS422 HIGH SPEED ISOLATOR FDIR-22C



Ordering number

FDIR-22C

Fast Digital Isolated Repeater
2 Input, 2 Output (4wire)

Contact

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Features

- Two-way full isolated
- Compatible with RS422
- Fast communication speed
- Wide range of supply voltage

Description

FDIR-22C isolator can galvanic isolate differential signals for RS422 communication up to 1500V to protect sensitive devices such as PLC I/O cards. With a 5Mbps data rate, high speed can be reached. Thanks to using Phoenix terminal, wiring is easy. The Package of this device is based on the DIN-rail. The inputs and outputs have been protected against short-circuited and against connecting to high voltage (up to 40 VDC).

Absolute maximum ratings

Rating	Value	Unit
Power supply voltage	36	VDC
Data input/output	-9 to +14	V
CLK input/output	-9 to +14	V
Storage Temperature Range	-20 to 120	°C

Table 1: Maximum ratings

Technical specifications

Communication	
Standards	4-wire RS422
Speed	5Mbps
Connector Type	Phoenix PTR
Rise time (10...90%)	65ns
Fall time (90...10%)	65ns
Propagation delay	80ns
Termination resistor	150Ω (optional with jumper)
Electrical	
Power	10~30 VDC
Optical Isolation	1500V 1min (3000V 1sec, DC)
Current consumption	25mA in 24 VDC (0.6 watt)
Mechanical	
Housing	Plastic
Mount	DIN-Rail
Weight	0.1Kg
Dimensions	114*22.5*99 (mm)
Environmental	
Operating temperature	-20 ~ 70 °C
Operating humidity	5 ~ 95 % (Non-condensed)
Protection class	IP20

Table 2: Technical specifications

Input/output signals

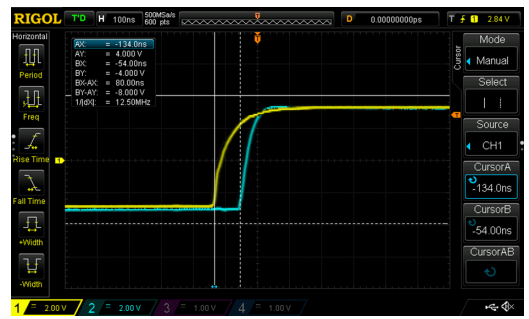


Figure 1: Propagation delay (Input=Yellow , Output=Blue)

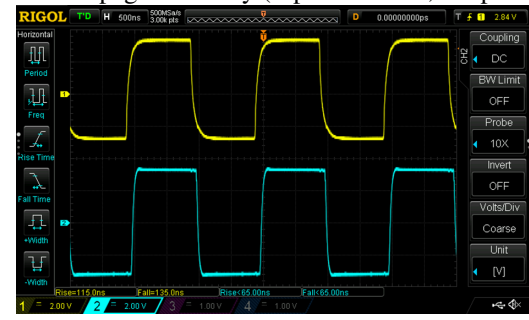


Figure 2: Rise/Fall time (Input=Yellow , Output=Blue)