

# Model: UT-6504-FD

(Product Name: Ethernet to 4-port CANBUS-FD Protocol Converter)

## Datasheet

## 1. Brand and Manufacturer Information

- Brand: UTEK Technology (UTEK)
- Manufacturer:
- Logo: 

## 2. Material Model and Version

- Model: UT-6504-FD
- Version: VER:01

## 3. Overview

UT-6504-FD is a high-performance CAN-bus communication converter with integrated 4 CAN-FD interfaces and 1 network port. The converter supports interconnection between 10M/100M Ethernet networks and CAN-bus communication rates from 5Kbps to 5Mbps, further expanding the application range of CAN-bus and Ethernet. UT-6504-FD converter provides a web configuration interface, allowing users to flexibly set the operating parameters. It features an industrial-grade high-standard design with isolation between communication interfaces and the system, providing certain anti-interference and surge protection capabilities. It is widely used in industrial control and data communication systems.

## 4. Main Functions and Features

- Achieves bidirectional data transfer between CAN-bus and the network
- Supports CAN2.0, CANFD protocols
- Integrated 4 CAN-bus-FD communication interfaces, supporting communication rates from 5Kbps to 5Mbps
- Integrated 1 10M/100M Ethernet interface
- Operating Voltage: 12-36V DC
- Operating Current: ≤ 200mA@12V
- Operating Temperature: -40~+85°C
- Storage Temperature: -40~+85°C
- Operating Humidity: 5~95% (non-condensing)
- Storage Humidity: 5~95% (non-condensing)
- Isolation Voltage: 1000VDC
- ESD Protection: Level 3.
- Surge Protection: Power Port: Level 3, Network Port: Level 3

- EN 61000-4-3 CS Power 3V/m, Network 3V/m
- EN 61000-4-6 RS 10V/m
- EMI RE, CE: EN55032 classA

## 5. Indicator Lights

PWR: Green, power indicator light; stays on when power is normal.

RUN: Green, system running indicator light; flashes during system operation.

CAN1: Green, communication indicator light; flashes when CAN1 sends or receives data, goes off after transmission and reception are complete.

CAN2: Green, communication indicator light; flashes when CAN2 sends or receives data, goes off after transmission and reception are complete.

CAN3: Green, communication indicator light; flashes when CAN3 sends or receives data, goes off after transmission and reception are complete.

CAN4: Green, communication indicator light; flashes when CAN4 sends or receives data, goes off after transmission and reception are complete.

### Button Definition

Reset: Press and hold for 5 seconds to restore the device to factory settings.

## 6. Pin Definitions

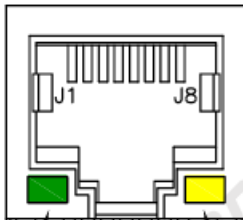
### (1) Terminal Pin Definitions



Pin No.	Pin Name	Description	Pin No.	Pin Name	Description
1	CAN1-H	CAN1-H Signal Connection	1	CAN2-H	CAN2-H Signal Connection
2	CAN1-L	CAN1-L Signal Connection	2	CAN2-L	CAN2-L Signal Connection
3	RES1-	CAN1 Matching Resistor End 2	3	RES2-	CAN2 Matching Resistor End 1
4	RES1-	CAN1 Matching Resistor End 2	4	RES2-	CAN2 Matching Resistor End 2
1	CAN3-H	CAN3-H Signal Connection	1	CAN4-H	CAN4-H Signal Connection
2	CAN3-L	CAN3-L Signal Connection	2	CAN4-L	CAN4-L Signal Connection
3	RES3+	CAN3 Matching Resistor End 1	3	RES4+	CAN4 Matching Resistor End 1
4	RES3-	CAN3 Matching Resistor End 2	4	RES4-	CAN4 Matching Resistor End 2

3.81-4 pin Phoenix Terminal

(2) RJ45 Network Port Definitions



RJ45	Definition	Description
1	TX+	Transmit Signal Positive
2	TX-	Transmit Signal Negative
3	RX+	Receive Signal Positive
6	RX-	Receive Signal Negative
4, 5, 7, 8	-	-

## 7. Technical Parameters

1. Interface: Complies with EIA RS-232 and CCITT V.24 asynchronous protocols
2. Connectors: DB9 connectors on both sides
3. Transmission Mode: Asynchronous, full-duplex, full-transparent
4. Isolation Voltage: 2500Vrms pulse or 500VDC continuous
5. Baud Rate: 300bps-38400bps

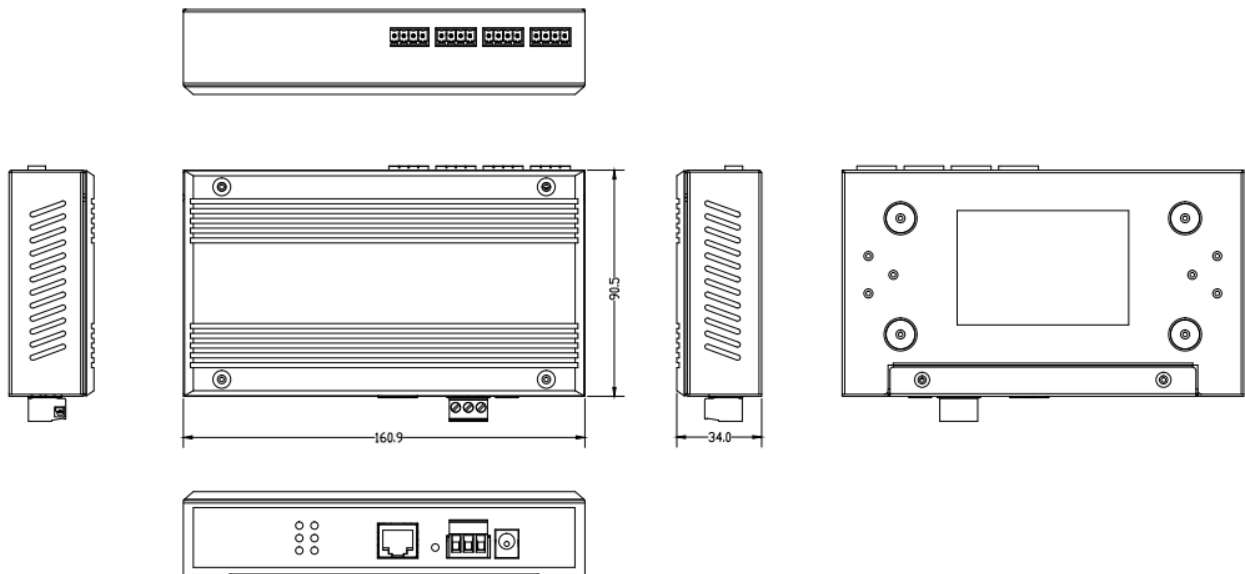
- 6. Power Supply: Powered from the RS-232 port (TXD, RTS, or DTR)
- 7. Dimensions: 63mm×33mm×17mm
- 8. Weight: 30g
- 9. Operating Environment: -40°C to 85°C, relative humidity 5% to 95%

## 8 Appearance



Note: Production batch number and production date are subject to actual goods.

## 9. Dimensions



## 10. Accessories List

Name	Quality(unit)
UT-6504-FD	1
Wiring Terminals	5
Certificate of Conformity	1
Warranty Card	1
Power Adapter	1