

MX942-1D Explosion-Proof 5G DTU

Features

- 1x RS232 and 1x RS485 connector, reserved 3x I/O connectors and 2x ADC
- Support transparent data transmission, embedded standard TCP/IP protocol stack
- Supports multi-center (up to 5) and TCP server functions
- Support DDNS can access the center according to the domain name and IP address
- Support TCP heartbeat link detection, keep the device always online
- Support APN/VPDN
- Support SMS backup function, when TCP/UDP is disconnected, data can be sent by SMS
- Supports various online and offline trigger modes such as SMS, phone ringing, serial port data, etc.
- Support equipment running self-checking with self-fault-repair technology for both software and hardware



Description

MX942-1D Explosion-Proof 5G DTU is a seven-mode industrial-grade wireless data transmission terminal, designed to fully meet the requirements of industrial-grade standards from industrial users, using high-performance industrial-grade 32-bit communication processors, software multi-level detection and hardware multiple protection mechanisms to improve device stability. It supports 5G/4G/3G/2G network, flexible connector, support standard RS232, RS485, with TTL can be customized. This series of products can help users quickly access to high-speed Internet and achieve safe and reliable data transmission. It is widely used in oil field monitoring, chemical industry, combustible gas warehouse, explosion-proof workshop, coal mine, logistics warehousing and other industries.

Specification

INDUSTRIAL GRADE DESIGN:	ANTI-OFFLINE:	ANTI-LOST DATA:
100% industrial grade	Watchdog detection mechanism	Data resend setting
Meet industrial applications	TCP heartbeat link detection	Offline reconnect & data resend
	Make sure devices always online	Ensure data won't be lost
LOW POWER CONSUMPTION:	MULTI-CENTER TRANSMISSION:	REMOTE MANAGEMENT:
Ultra-low power consumption	Up to 5 centers	remote configuration
Communicate consumption <1W	Multi-center synchronous	remote troubleshooting
	visual display of multi-level data	remote restart device
REMOTE UPGRADE:	ANTI-INTERFERENCE:	EASY TO USE:
Remote management platform	Meet EMC requirements	Simple to use and easy to install
remote Firmware upgrade	Suitable for various scenes	Powerful configuration tools
SAVE MANPOWER AND MATERIALS	APPLICABLE TO HIGH-POWER EQUIPMENT OCCASIONS	INTEGRATION OF UPGRADES AND DEBUGGING

Product Connector

DESCRIPTION	DETAILS
POWER:	
Standard power	DC 12V/0.5A
Power supply	DC 5~35V
Built-in power reverse phase protection and overvoltage protection.	
SERIAL PORT:	
The serial port adopts industrial terminal interface, suitable for industrial applications, RS232 or RS485 connector	
Built-in 15KV ESD protection, customizable TTL	
ANALOG:	
Reserve 2 analog input connectors (10-PIN AD, support 4-20mA current signal input, optional 0-5V voltage signal input)	
IO:	
3 GPIOs are reserved, which can be configured as input and output, and the communication level is 3.3V	
SERIAL PORT PARAMETERS:	
Serial port rate	300~230400bits/s
data bits	5, 6, 7, 8
stop bit	1, 1.5, 2
check	No parity, even parity, odd parity, SPACE and MARK parity
OTHER:	
indicator light	With system, power, communication and online indicators
Antenna interface	External fiberglass antenna
SIM/UIM card interface	Standard drawer user card interface, support 1.8V/3V SIM/UIM card, built-in 15KV ESD protection

Features

DESCRIPTION	DETAILS
ENVIRONMENTAL CONDITIONS:	
Operating temperature : -30°C ~ 70°C	Storage temperature : -40~+80°C
Relative humidity : 95%	Atmospheric pressure: 86 ~ 106KPa
WORKING POWER CONSUMPTION:	
communication	<1.08W

Description: 12V power supply, current <90mA 5V power supply, current <190mA			
standby		<0.288W	
Description: 12V power supply, current <24mA 5V power supply, current <50mA			
ANTI-INTERFERENCE:			
type	level	Voltage/Current Waveform	value
Power frequency magnetic field	3	continuous sine wave	30A/m
Damped oscillating magnetic field	3	continuous sine wave	30A/m
pulsed magnetic field	3	pulse	100A/m
Radiated electromagnetic fields	3	80MHz~1000MHz CW	10V/m
Equipment suitable for installation in typical industrial environments: chemical plants, gas tanks, oil drilling platforms, etc.			
PROTECTION CLASS:			
Protection class: Exd IIC T6 Gb/Ex tD A21 IP68 T80°C	In environments with explosive gas or dust or other safer places, typical hazards are: propylene (methyl acetylene), cyclopropane, acrylonitrile, ether (alcohol), coke oven gas, wood powder, metal powder, etc.		
RELIABILITY:			
The mean time between failures (MTBF) is not less than 100000h			
Ultra-low power design, including sleep mode, timed online and offline modes			
The EMC level indicators are up to level 3			
Using NTP technology, built-in RTC			
SIM/UIM card interface with built-in 15KV ESD protection			
PHYSICAL DATA:			
Internal size: 300mm*204mm*87mm			
Weight: about 10.5KG			

Applications



petrol & oil & coal & mines



chemical factory



underground pipeline