Model:UT-5508

8-channel analog data acquisition module

Datasheet

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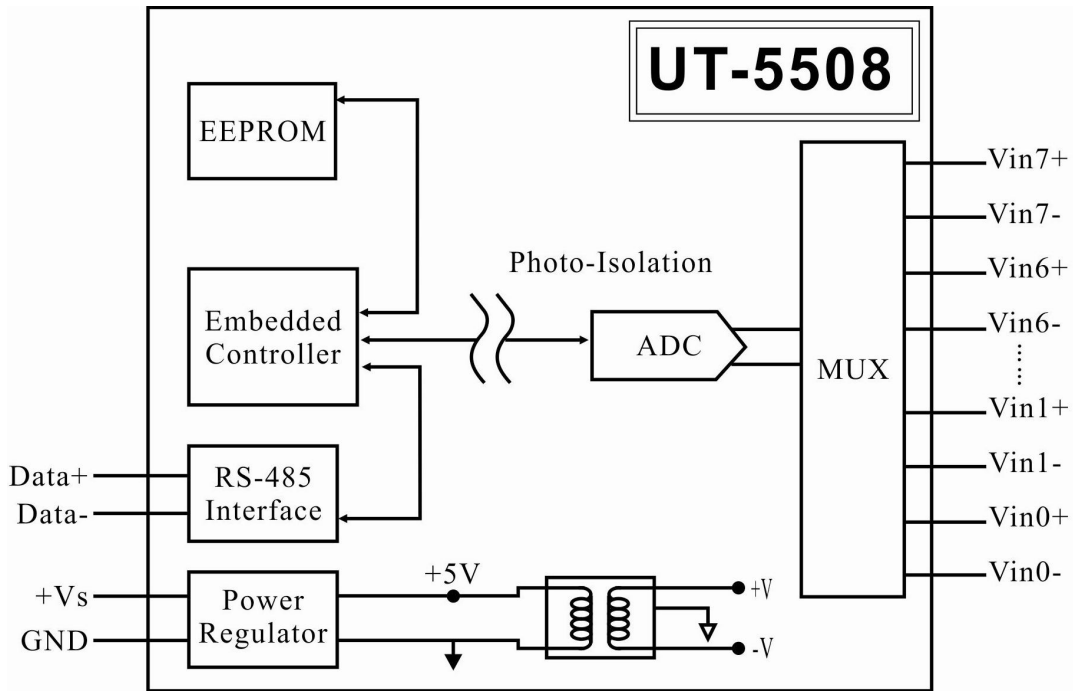
Http：www.uotek.com

1. Overview

UT-5508 module is used to collect analog input, It is designed with high industrial standard, using automotive grade MCU, with 8 channels of analog differential input, each channel has independent settable 8 range gear, internal hardware band pass filtering and software filtering processing of the signal, analog resolution up to 24 bits; RS485 interface, support MODBUS-RTU communication protocol; The products are suitable for industrial control, remote monitoring and data acquisition, power communication, rail transportation, ship electronics, machinery and heavy industry, electronic product manufacturing, etc.

The UT-5508 is a remote data acquisition module that can be remotely controlled by a series of commands via the UTBUS protocol. The baud rate is software settable and the transmission rate is selectable up to 115.2K. The UT-5508 also supports Modbus RTU protocol.
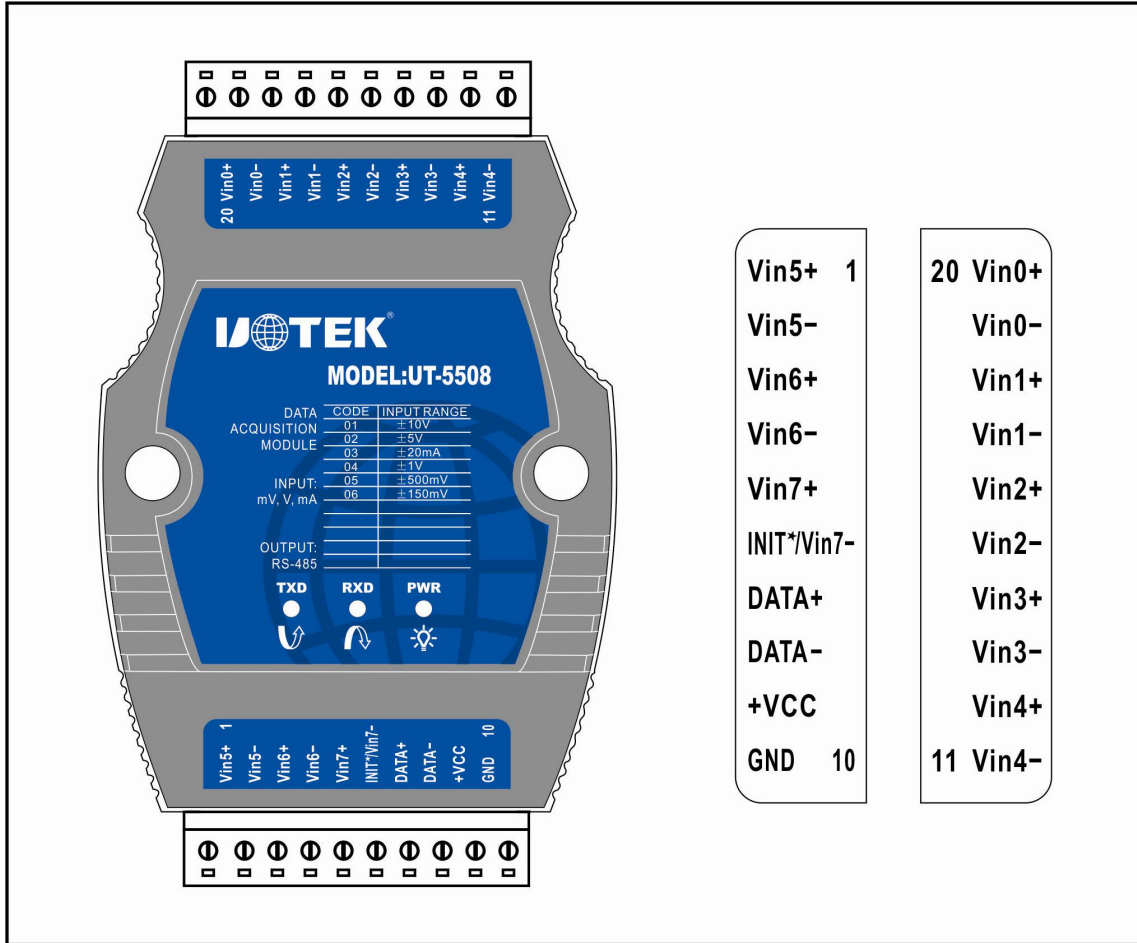
2. Technical Parameters

- Input channel: 8-CH differential(2-CH single end mode), jumper wire selection
- Analog input type: mV, V, mA(With 125 ohms resistance)
- Sampling rate: 10 samples/s
- Bandwidth: 15.7 Hz
- Precision: ±0.1%
- Zero drift: 20μV/℃
- Range drift: 25ppm/℃
- Input impedance: 20M Ohms
- Operating temperature: -25 ~ 75℃
- Storage temperature: -30 ~ 75℃
- Relative humidity: 5 ~ 95%
- Isolation: 2,500VDC
- Supply power
  Input: 12 ~ 30VDC
  Power consumption: 1.3W

3. Hardware definition and initial setup
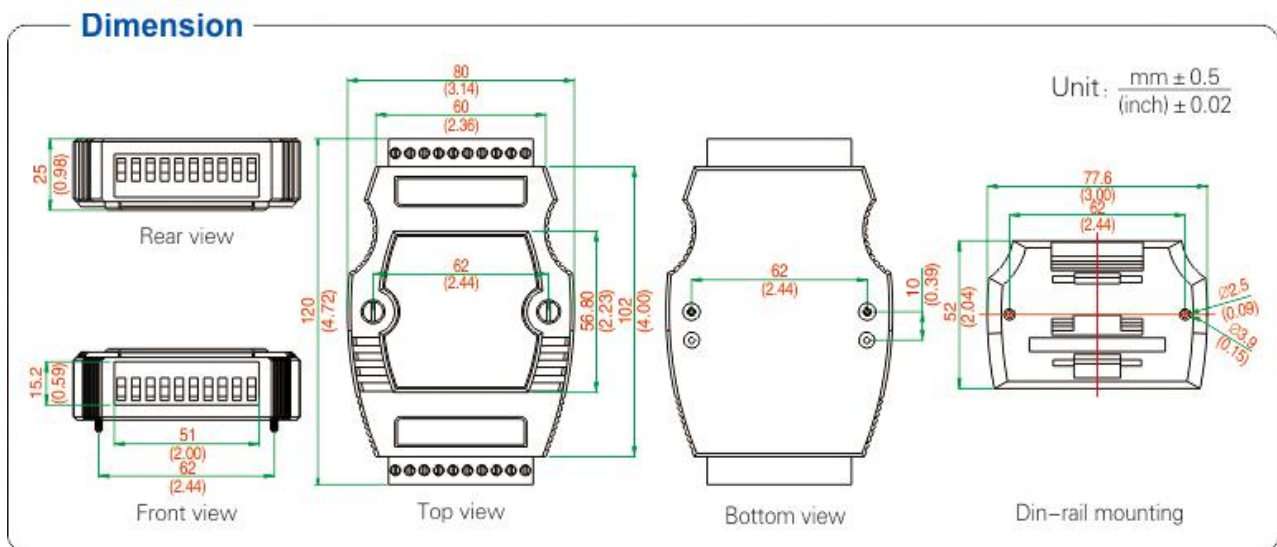

4. Product View (Appearance)

UTEK®

MODEL:UT-5508

DATA ACQUISITION MODULE

CODE	INPUT RANGE
01	±10V
02	±5V
03	±20mA
04	±1V
05	±500mV
06	±150mV

INPUT: mV, V, mA

OUTPUT: RS-485

TXD   RXD   PWR

Vin5+	1		20	Vin0+
Vin5−				Vin0−
Vin6+				Vin1+
Vin6−				Vin1−
Vin7+				Vin2+
INIT*/Vin7−				Vin2−
DATA+				Vin3+
DATA−				Vin3−
+VCC				Vin4+
GND	10		11	Vin4−

6. Structure Dimension

Dimension

Unit: mm ± 0.5 / (inch) ± 0.02

Rear view — 25 (0.98)

Front view — 15.2 (0.59), 51 (2.00), 62 (2.44)

Top view — 80 (3.14), 60 (2.36), 62 (2.44), 120 (4.72), 56.80 (2.23), 102 (4.00)

Bottom view — 62 (2.44), 10 (0.39)

Din-rail mounting — 77.6 (3.00), 62 (2.44), 52 (2.04), Ø2.5 (0.09), Ø3.9 (0.15)

7. Ordering Information

Model	Signal/ Interface			Protection level	Baud rate	Operating Environment			Power	
	RS232/ 485	Analog input	Analog output			Temperature		Humidity	Power	
	Terminal block			RS232/485		-25~70 ℃	-40~85 ℃	5~95%	plug and play	External power
UT-5508	√	√		600W Surge	1200bps~115200bps	√		√		9~36VDC