

General

Version 1.0

MT-200 series is world's smallest USB CO₂ Monitor. MT-200 works with Desk-Top or Notebook, Smart-Phone and others. it gives 4 different level of LED light depending on CO₂ concentration level.

ELT SENSOR Data Sheet for MT-200

**Features**

- Non-Dispersive Infrared (NDIR) technology used to measure CO₂ levels.
- The world smallest size USB CO₂ monitor
- Pre-calibrated
- Gold-plated sensor provides long-term calibration stability.
- .Support MCDL (Manual Calibration), ACDL(Auto Self Calibration) functions.
- Support to USB 2.0
- Power: USB port of PC USB standard-A, Smart-Phone (Micro-B USB plug), USB Power-Bank etc.
- Size : Size: 55.6mmx19.5mmx11mm
- Weight : 5 gram

MT-200 Specifications

General Performance

Operating Temperature : -20 ~ 60 °C
 Operating Humidity : 0 ~ 95% RH (Non-condensing)
 Operating Environment : Residential, Commercial spaces
 Storage Temperature : -30 °C ~ 70 °C

CO₂ Measurement

Sensing Method : NDIR (Non-dispersive Infrared)
 Measurement Range : 0 ~ 10,000 ppm (~ 5% , 10% are optional)
 Accuracy : ±50ppm ±3% of reading for 0~10,000 ppm (±300ppm ± 3% of reading up to 5%, 10%)
 Response Time (1/e) : 40 seconds (c.f. T90 : 65 seconds)
 Sampling Interval : 3 seconds
 Warming-up Time : < 6 seconds (for Operation), 5 minutes (for Accuracy)

Electrical Data

Power Input : 3.5V ~ 5.2V (USB)
 Current Consumption : Normal mode : 20mA, Peak : 230mA

Product Option with Functions

Products	Option List
MT-200	Basic Model with USB Output
MT-200A	ACDL Software is added on t MT-200, which Calibrate Sensor every week

MT-200 is basic model which gives USB output and Non-Periodic Manual Calibration (10' MCDL) are executable with EK-100 Kit
 'A' option has ACDL software in sensor and calibrate weekly after once in 2day from power-on appropriate for Indoor Air-Quality Monitoring.

Ordering Code for MT-200 series

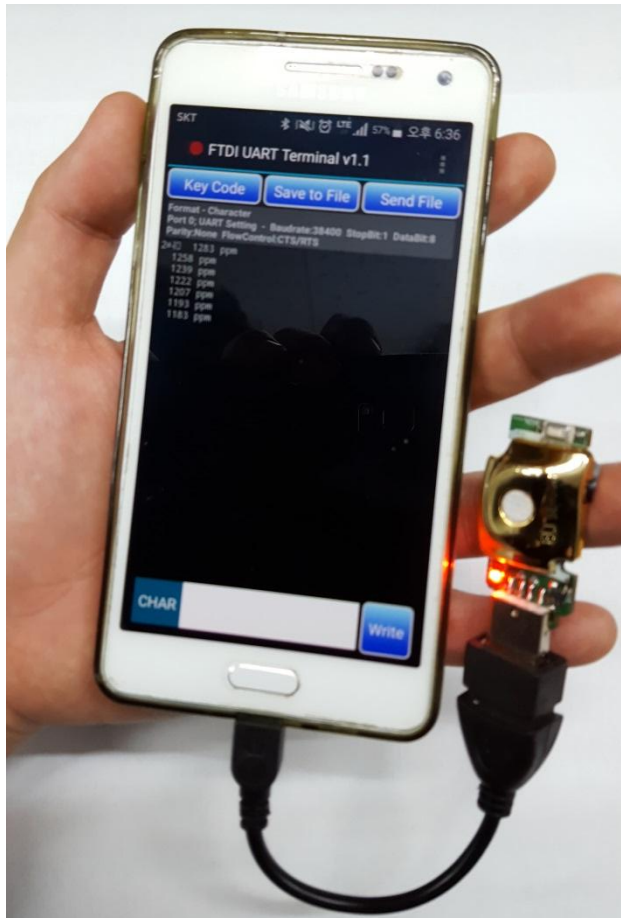
Code	Specification
MT-200-AU	MT-200 + ELT WSD Program for Desk-Top or Notebook
MT-200-BU	MT-200-AU + OTG zender for Smart phone

Demonstration with Smart Phone.

Android App



<http://www.ftdichip.com/Android.htm>



< App. setting >

1. install FTDI App.
2. Execute FTDI UART App.
3. Setting
 - ① Baud Rate
→ 38400
 - ② Flow control
→ CTS/RTS

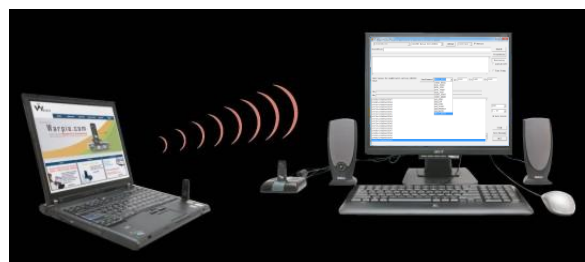
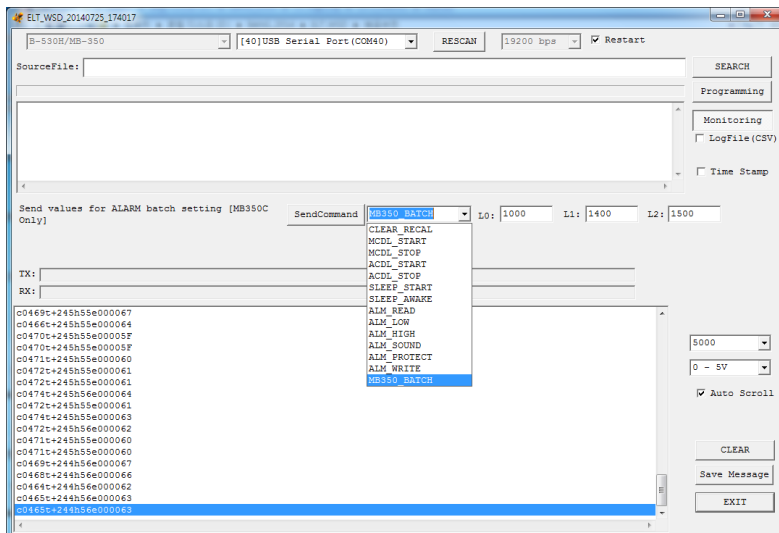
Range	LED
under 1000ppm	Green ON
1000≤[CO2] < 2000ppm	Green Blink



Range	LED
2000≤[CO2] < 3000ppm	RED ON
Over 3000ppm	RED Blink



Monitoring Test with Notebook or Desk-Top. (ELTWSD_EK100 S/W)



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