

Welcome to your ETM Product

Get started: This guide helps with initial product setup. Need more? Find additional product information by simply scanning the QR code.



Support: For support, please visit www.etmiot.com or e-mail support@sigicom.com. If urgent, please call us using the number below.

Quick Start Guide



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INTRODUCTION

DeltaBlack is an easy to use Cellular 4G/3G/2G remote monitoring and logging solution for use in heavy duty industrial applications.

Common applications include:

- Pump, fan, generator and motor
- Refrigeration and freezer systems
- Metering, HVAC, indoor climate
- Fire panels and intruder alarms
- Data centre monitoring
- Tank measurements

FEATURES

- Integrated 7-channel data logger including one relay output
- DIN-rail mounted including wall mount bracket
- Integrated 2G/3G/4G world wide wireless modem
- Customized SMS alerts
- LED indication for cellular signal quality and communication status
- Pre-configured for the most common sensor types
- Easy access to logged measurements via ETM's IoT Cloud Dashboard (EWO)
- Easy integration to PLC, SCADA and telemetry systems

PIN DESCRIPTION

Channels	Type (Multiple options per channel)
CH1	Digital or Pulse
CH2	Pulse or Analogue (4-20mA or 0-2,5V)
CH3	Pulse or Analogue (4-20mA or 0-2,5V)
CH4	Pulse or Analogue (4-20mA or 0-2,5V)
CH5	Digital or Analogue (4-20mA or 0-2,5V)
CH6	Digital or Analogue (0-30V or 0-2,5V)
CH7	Digital or Analogue (0-30V or 0-2,5V)
SGND	Signal Ground
SGND	Signal Ground
Relay	COM (Common) NO (Normally Open) NC (Normally Closed)
Sensor Feed	5V and 16V max 100mA
Micro USB	Communication with PC
V+ In	(6-35VDC)
V- In	Power Supply

ACCESSORIES



Pressure Sensor



Temperature/Humidity Sensor



Power Supply



Screw mount antenna



Magnetic base antenna



USB to RJ45 Adapter

LED INDICATOR

Signal strength LEDs

LED	Indicator	Signal Strength
1	Flashing	RSSI < -105dBm or No SIM detected
	On	RSSI ≥ -105dBm (Poor signal)
	Off	Not registered to mobile network
2	On	RSSI ≥ -89dBm (Fair signal)
	Off	RSSI < -89dBm or not reg. to mobile network
3	On	RSSI ≥ -73dBm (Good signal)
	Off	RSSI < -73dBm or not reg. to mobile network

Status LEDs

LED	Indicator	Status
1	Slow Flash	Searching for network connection
	2x Flash 3s Pause	Active 2G network connection
	3x Flash 3s Pause	Active 3G network connection
	4x Flash 3s Pause	Active 4G network connection
2	On	Internet provider connection
	Off	No Internet provider connection
3	On	Receiving data (2s active)
	Off	No data transmission occurring
	Rapid Flash	Sending Data

Getting Started

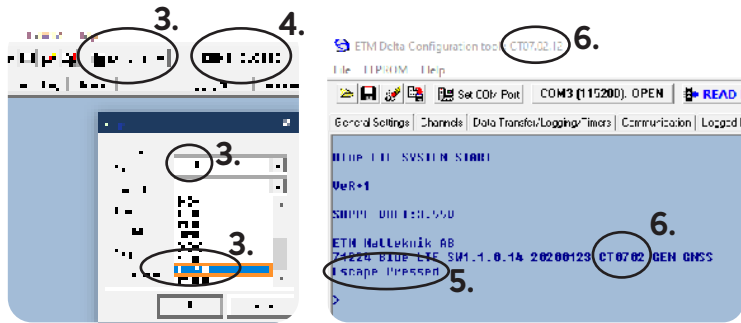
1. Connecting the hardware

CONNECTING SIM CARD



1. Connect the SIM Card
2. To configure the device, connect a micro USB cable to a PC and follow the configuration guide below.
3. To power up the device, connect a 6-35VDC power supply through the terminal. For configuration, the micro USB will provide enough power.

2. CONFIGURATION TOOL



1. Start the configuration tool. It can be downloaded from etmiot.com
2. Connect the unit to your computer.
3. Go to the terminal tab, use "Set COM Port" to choose the right COM port (most likely not COM1) and set the baud rate to 115200.
4. Open the port by pressing "COM(X): CLOSED".
5. Click anywhere in the blue window until you see a flashing square. Proceed by pressing the "reset" button on the modem, then immediately press "Esc" on your keyboard until the message "Escape Pressed" shows up.
6. Make sure that the firmware matches the configuration tool version like the picture above (6).
7. The unit is now ready to be configured.

4. EWO (ETM WEB OFFICE)



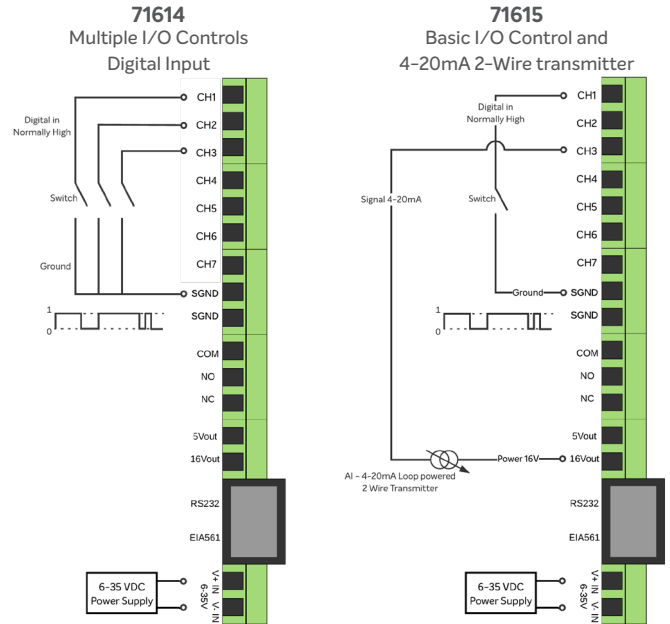
- Log in using the provided login credentials
- Manage your account, units and organisation in the settings.
- Under settings > configuration choose which data you want to be presented
- Enjoy your ETM product

To access the ETM IoT Cloud Dashboard, please visit the website or scan the QR Code.

www.etmweboffice.com/EWO/pages/login.jsp



WIRING EXAMPLES



3. CONFIGURING THE UNIT

3. File EEPROM Help

COM71: CLOSED **2.** READ MEMORY **1.** WRITE MEMORY

General Settings | Channels | Data Transfer/Logging/Timers | Communication | Logged Data | Terminal | Server | Channel Calibration

General settings
Used for adding phone numbers, change Unit ID, Clock sync, data formats...

Channel settings
Setting up and configuring alarms on different channels/pins.

Data Transfer/Logging Timers
For data logging/monitoring. Choosing which data the unit will gather and send.

Communication
Specify where the unit should send the data.

1. When done configuring the unit, press the red button "WRITE MEMORY" to upload the configuration to the unit.
2. To see the current configuration on the device, press "READ MEMORY" when having the unit connected to the computer to read it onto the configuration tool.
3. To save your configuration to use for future units press "File" in the top left corner, then "save" in the dropdown menu, and save it to an optional location.
4. Your unit is now ready to use.

ETM PRODUCTS



DeltaBlue
Outdoor and battery-powered remote monitoring, alarming & logging solution



DeltaBlack
Industrial cellular remote monitoring, alarming & logging solution



ETM-Purple
Intelligent cellular 2G/3G/4G with "last gasp"



770-PRO
Cellular Network Monitoring tool Cat M1/NB-IoT 2G/3G/4G