etmpacific DeltaBlue Mini Wireless Data Logger User Guide

Contents

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INTRODUCTION

DeltaBlue Mini & DeltaBlue Pro are battery-powered, rugged devices used for measuring and control in remote areas or installations without access to mains power or a fixed communication line.

TYPICAL APPLICATIONS

- Well and Pit monitoring
- Tank measurements
- Water and sewer treatment
- Agriculture applications
- Remote alarms
- Lake water level monitoring

FEATURES

- Up to 3 years battery lifetime* (Depending on settings)
- Integrated 6-channel data logger
- Integrated 2G/3G/4G wireless modem
- Integrated GPS, temperature, humidity, and accelerometer
- Pre-configured for the most common sensor types with 3.6V, 5V & 16V power feeds.
- Easy access to logged measurements via UTM’s IoT Cloud Dashboard (IoTconx)
- Easy integration into SCADA and telemetry systems

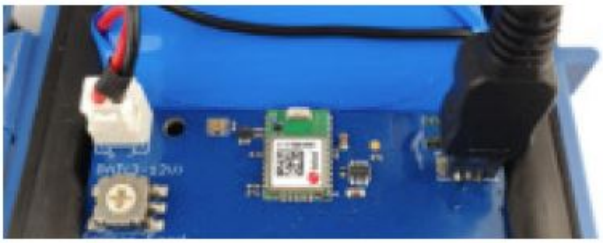
ACCESSORIES

Getting Started

CONNECTING THE HARDWARE

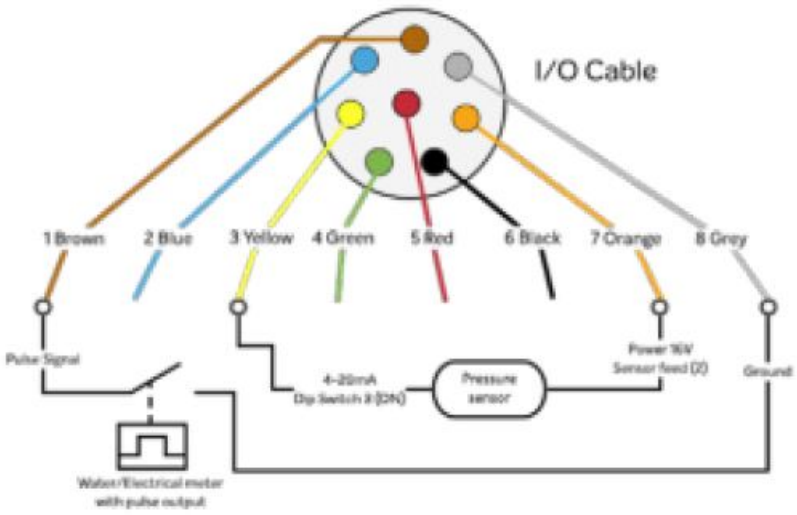
CONNECTING SIM CARD

BATTERY AND COMMUNICATION



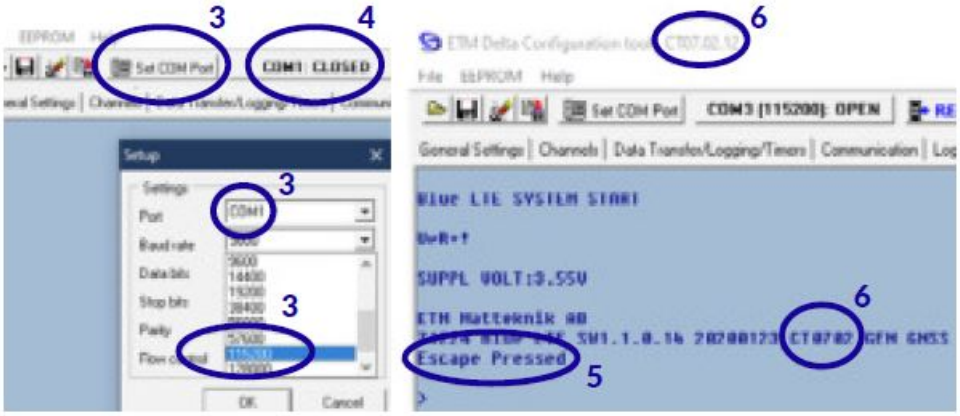
WIRING EXAMPLES

- Water/Electrical meter
- Pressure Sensor



CONFIGURATION TOOL

1. Start the configuration tool
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 the that the firmware matches the configuration tool version like the picture above (6)
7. The unit is now ready to be configured.



CONFIGURING THE UNIT

1. When done configuring the unit, press the red button ”WRITE MEMORY” to upload the configuration to the unit.
2. To see what configuration is already on the unit, 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.

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.

LED INDICATOR

Green status LEDs		
1 **Network**	Slow Flash 2x Flash 3s Pause 3x Flash 3s Pause 4x Flash 3s Pause	Searching for network connection Active 2G network connection Active 3G network connection Active 4G network connection
2 **IP status**	On Of	Internet provider connection No Internet provider connection
3 **Data Com**	On Off Rapid Flash	Recieving data (2s active) No data transmittion occurring Sending Data
Yellow signal strength LEDs		
1 **Poor**	Flashing On Of	RSSI < -105dBm or No SIM detected RSSI ≥ -105dBm (Poor signal) Not registered to mobile network
2 **Fair**	Flashing On Of	No SIM detected RSSI ≥ -89dBm (Fair signal) RSSI < -89dBm or not reg. to mobile network
3 **Good**	Flashing On Of	No SIM detected RSSI ≥ -73dBm (Good signal) RSSI < -73dBm or not reg. to mobile network

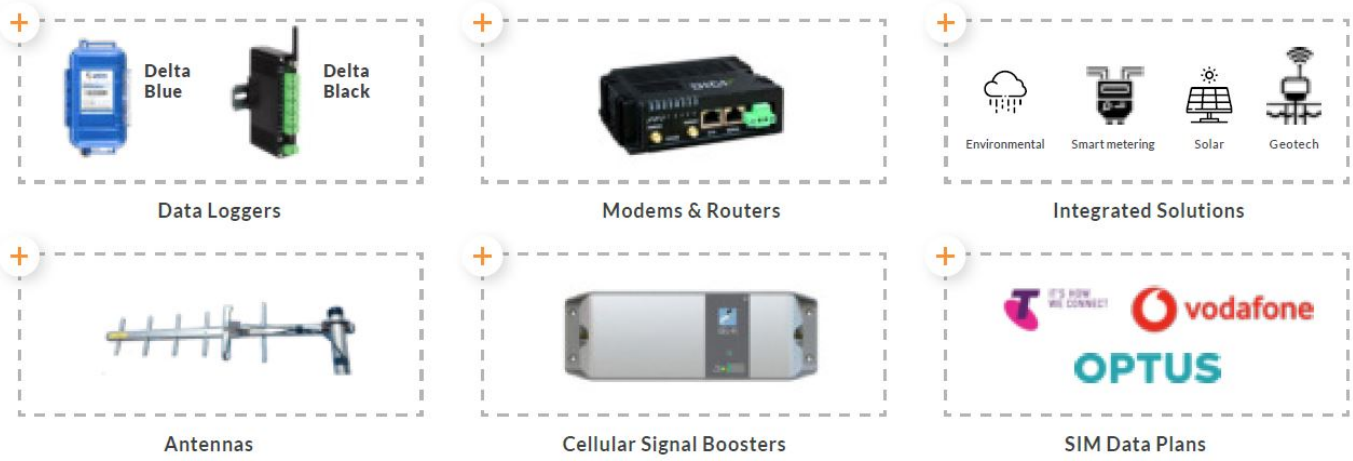
PIN DESCRIPTION

Channel	Colour	Dip Switch OFF	Dip Switch ON
Ch1 IO	**Brown**	DI, Pulse	DI, Pulse Strong Pullup
Ch2 IO	**Blue**	DI,AI,0-2.5V	AI 4-20mA
Ch3 IO	**Yellow**	DI,AI,0-2.5V	AI 4-20mA
Ch4 IO	**Green**	DI,AI,0-2.5V	AI 4-20mA
Ch5 IO	**Red**	DI,AI,0-2.5V	AI 4-20mA
Ch6 IO	**Black**	AI 0-5VDC	AI 0-10VDC
Ch7 Feed	**Orange**	• 5V Out • 16V Out	3.6V Out (Battery)
Ch8 GND	**Grey**	Signal Ground	

- DI-Digital Input
- AI-Analogue Input

MORE ABOUT IoTconx:
IoTConx is ETM's cloud-based platform designed for the capture, storage, manipulation, and display of the data resulting from Delta Blue sensors or the data feed from your device being monitored. Logged data can be downloaded in various formats with option to link with 3rd Party platforms via API. IoTConx can be customized to meet specific customer user interface requirements and can be deployed on private server instances.

IoT PRODUCT RANGE



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- EQSG-DeltaBluePro&Mini/a/v.1.01

Documents / Resources

	etmpacific DeltaBlue Mini Wireless Data Logger [pdf] User Guide DeltaBlue Mini, DeltaBlue Mini Wireless Data Logger, Wireless Data Logger, Data Logger, Logger

References

- ETM Pacific | Specialist in Cellular and LoRa Connectivity