# **Quick Start Guide**







# **INTRODUCTION**

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

### **TYPICAL APPLICATIONS**

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

# FEATURES

- Up to 3 years battery life time\* (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 feed.
- Easy access to logged measurements via ETM's IoT Cloud Dashboard (IoTconx)
- Easy integration to SCADA and telemetry systems

# **ACCESSORIES**



External Antenna



Screw mount antenna



Pressure Sensor



Temperature/ Humidity Sensor



Replacement battery



Stainless steel mounting plate



MORE INFO:

# **Getting Started**

#### 1. CONNECTING THE HARDWARE

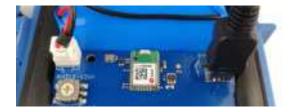
# **CONNECTING SIM CARD**





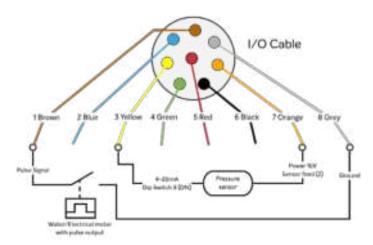


#### **BATTERY AND COMMUNICATION**



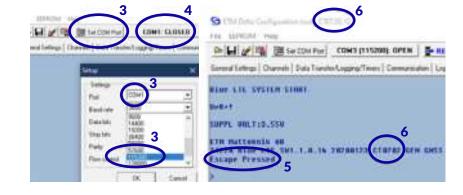
#### WIRING EXAMPLES

- Water/Electrical meter
- Pressure Sensor



# 2. CONFIGURATION TOOL

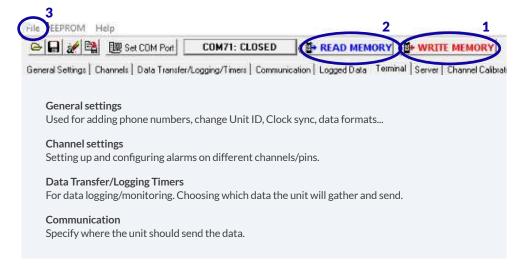
- 1. Start the configuration tool
- 2. Connect the unit to your computer
- 3. Go to the terminal tab, use "Set COM Port" to choose the right COM port (most likely not COM1) and set the baud rate to 115200
- 4. Open the port by pressing "COM(X): CLOSED"
- 5. Click anywhere in the blue window until you 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.

## 3. CONFIGURING THE UNIT

- 1. When done configuring the unit, press the red button "WRITE MEMORY" to upload the configuration to the unit.
- 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.





# **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 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.

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## **IoT PRODUCT RANGE:**













