DeltaBlack
INDUSTRIAL IOT EDGE SOLUTION

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

An Industrial IoT edge device designed to work in the cloud with SCADA systems or via simple user friendly SMS commands.

With multiple I/O channels, wide operating supply voltage, DIN-rail mount and integrated RS232 modem, DeltaBlack is the ideal solution for a wide range of industrial applications.

INDUSTRIAL CELLULAR REMOTE MONITORING, ALARMING & LOGGING SOLUTION

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

BENEFITS

- Low cost and low maintenance
- Immediate notification via WEB, SMS or email when a serious event occurs
- Reduces down time and minimizes damage on equipment
- No need for fixed communication
- Multiple pre-configured in/outputs for easy and fast installation
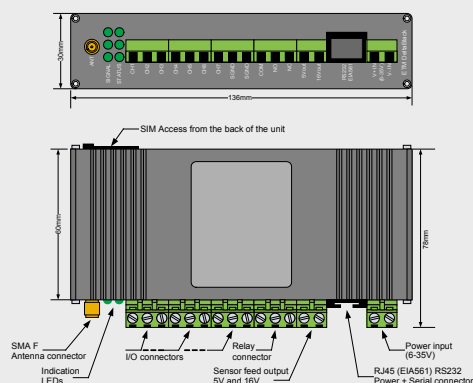- Remote user friendly configuration via ETM's IoT Cloud Dashboard (EWO)

The DeltaBlack comes with pre-provision SIM-card. Connect the sensors, turn on the power and log into ETM's IoT Cloud Dashboard (EWO) to remotely manage DeltaBlack and get access to the measured data from anywhere.

APPLICATIONS

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

SENSOR TYPES

- **Temperature & humidity**
- **Level**
- **Flow**
- **Pressure**
- **Pulse - meters, electrical, water, gas**
- **CT - Current transducers**

PHYSICAL DIMENSIONS

SIM Access from the back of the unit

SMA F Antenna connector
Indication LEDs
I/O connectors
Relay connector
Sensor feed output 5V and 16V
Power input (6-35V)
RJ45 (EIA561) RS232 Power + Serial connector

SPECIFICATIONS

Model	DeltaBlack	
Part no:	71610	71611
I/O Connections	5 digital I/O, 4 pulse counters (LL<0.5V, HL>2.5V or dry contact) 1 analogue 0–5 V input 1 analogue 0–10 V input 1 relay output (NO and NC) 5 and 16V stabilized and controlled output for sensor feed	1 digital I/O, 1 pulse counter (LL<0.5V, HL>2.5V or dry contact) 4 analogue 4–20 mA inputs 1 analogue 0–5 V input 1 analogue 0–10 V input 1 relay output (NO and NC) 5 and 16V stabilized and controlled output for sensor feed
Logging channels	max 7 simultaneous channels max logging frequency 1/min	
Cellular	2G , 3G and 4G LTE: 700/800/850/900/1700/1800/1900/2100/2600 MHz (band 1, 2, 3, 4, 5, 7, 8, 12, 18, 19, 20, 28) UMTS: 800/850/900/1700/1800/1900/2100 MHz (band 1, 2, 4, 5, 8, 9, 19) GPRS: 850/900/1800/1900 MHz	
Antenna	Cellular: Stub antenna or external SMA	
RS232	Via RJ45 connnector	
Power supply	6–35V via terminal block 600 mA (rated), <150mA (transmitting), <35mA (idle)	
Operating temp.	–30°C to +70°C	
Weight	250 g	
Size	30 x 136 x 87 mm	
Casing	Aluminium	
Accessories	Temperature sensor, temp/humidity sensor, depth pressure sensor, variety of external cellular antennas	

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