

# **WIRELESS DATA GATEWAY**

#### **FEATURES**

- Easy Integration
- RS485 / RS232 MODBUS RTU
- 176 parameters captured simultaneously
- Selectable logging and update intervals
- Connectivity over 4G(LTE) / UTMS / GPRS
- Light, compact & easy to deploy
- Low power
- Long data retention
- Device configuration over SMS & GUI
- Time synchronization via GPS
- Over the air firmware update
- 2 Analog single ended channel
- Desktop & mobile app

### **APPLICATIONS**

- Energy Monitoring
- Process Automation
- Asset and Condition Monitoring
- Water Supply Monitoring
- Industrial IoT Applications

#### FLT-WDG-85



### DESCRIPTION

Flint WDG-85 is a versatile, miniature, wireless IoT gateway that connects with various industrial devices such as PLCs, SCADA, energy meters over RS485 MODBUS RTU. Data from the device is collected and sent to remote cloud server over 2G/3G/4G network. The frequency of data collection and sending to server is configurable. Flint WDG-85 also has two analog input channels. Collected data is stored on an on-board SD card (expandable upto 32 Gb).

WDG-85 can be powered using a wide range (9 - 28 V DC) supply. The device contains two analog channels which measures voltage between 0 - 10 V and current between 4 - 20 mA. The device is compact and can be easily integrated into large OEM equipment so as to facilitate remote diagnostic and data acquisition for machine monitoring.



# **TECHNICAL SPECIFICATIONS**

2.2.4.	PARAMETER VALUE
PARAMETER NAME	FLINT WDG-85
COMMUNICATION	
Network	Quad-Band GSM, LTE
Network type	2G, 3G & 4G
Frequency Band	FDD LTE: B1/B3   TDD LTE: B38/B39/B40/B41 TDSCMA: B34/B39   WCDMA: B1   CDMA200 1x/EVDO: BCO GSM: 900/1800
Configuration & Data Retrieval	SMS & Desktop Application
Maximum Output Power	30 dBm
Receiver Input Sensitivity	-110 dBm
Interface	RS232 MODBUS RTU, RS485 MODBUS RTU, USB Mass Storage
ANALOG INPUT	
Channels	2 Single ended
Range	0 - 10 V 4 - 20 mA
Sampling Rate	1 Hz
ADC Resolution	12 bit
Accuracy	±0.1% of full scale
DIGITAL OUTPUT	
Digital Output	1
MICROCONTROLLER	
No. of Bits	32 bit
Frequency	100 MHz
LED Indication	Power, Network Health, Communication
ELECTRICAL	
Voltage Input	+9 to +28 V DC
Operating Current	< 150 mA
Reverse Polarity Protection	Up to 24 V
STORAGE	
Internal Memory	4 MB
SD Card Memory	8 GB (expandable up to 32 GB)
Mechanical	
Operating Temperature	-10 °C to +70 °C
Storage Temperature	-20 °C to +80 °C
Dimensions	90 mm (L) x 75 mm (W) x 54 mm (H)
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Preliminary Datasheet subject to change without prior notice



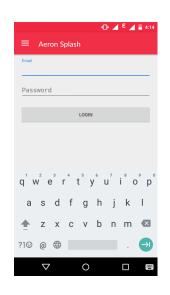
# WEB PORTAL, DESKTOP & ANDROID APPLICATION



A web portal application and a user friendly Android Application is available with WDG-85. Desktop application allows configuration settings and data retrieval. The Android app allows data viewing only.

Note: The Android app is available ONLY for customers who use Aeron's Web Services.

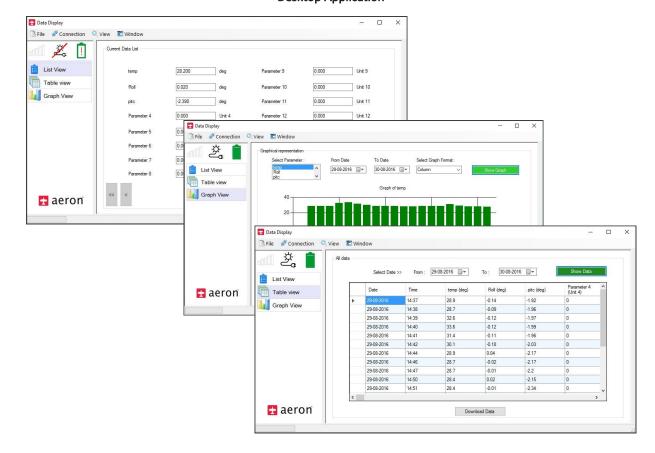
#### **Android Application**







### **Desktop Application**



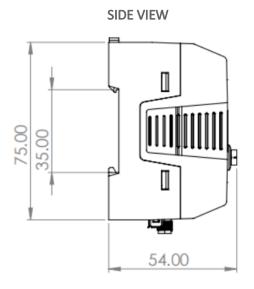
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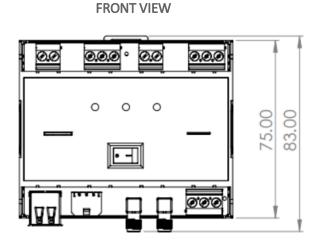
MADE IN INDIA

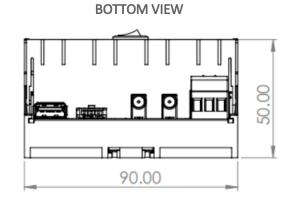


## **MECHANICAL DIMENSIONS**

All dimensions in mm







## ORDERING INFORMATION

FLT- WDG-85 (PRODUCT CODE: 20003)