## User's Manual COOLER MANAGER

FCC ID: 2ARZOCM2018V1 IC:24629-CM2018 Model: SmartFlow

HOW TO USE COOLER MANAGER

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## **USER'S MANUAL**

## Cooler Manager



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#### 1.0 General Information

General Information section explains in general terms the system and the purpose for which it is intended.

#### 1.1 System Overview

CoolerManagerTM is a state of the art IOT device specifically designed for beer or gas volume measurement, REALTIME beer volume tracking on the Point of Sale and data transfer with CLOUD servers via GSM, Bluetooth (Optional) or WIFI.

CoolerManagerTM is connecting to the server on every hour and sends the crucial data to cloud.

CoolerManager controller is built to work in hard and extreme conditions, withstanding heat, moisture, dust and grease build up.

#### 1.2 Organization of the manual

The user's manual consists of five sections: General Information, System Summary, Getting Started,

Using the System, and Reporting.

General Information section explains in general terms the system and the purpose for which it is intended.

System Summary section provides a general overview of the system. The summary outlines the uses of the system's hardware and software requirements, system's configuration, user access levels and system's behavior in case of any contingencies.

Getting Started section explains how to get Cooler Manager and install it on the device. The section presents briefly system menu.

Using The System section provides a detailed description of system functions.

Reporting section describes in what way information collected by the application are presented and how to access the information.



2.0 System summary



#### 2.0 System Summary

System Summary section provides a general overview of the system. The summary outlines the uses of the system's hardware and software requirements, system's configuration, user access levels and system's behavior in case of any contingencies.

#### 2.1 System Configuration

Regular Cooler Manager package consists of several parts:

- Cooler Manager controller in plastic box
- Power supply 9V DC
- Cooler Manager Turbine Flow Sensor
- GSM Antenna
- SD Card
- Android and iOS Application
- Cloud Server
- Dashboard for reporting

#### 2.2 User Access Levels

Only approved Staff can access Cooler Manager controller or CoolMan application. Owner of the of the Cooler Manager package defines the user roles and access levels.

#### 2.3 Contingencies

In case of power outage data is saved in internal memory of the operating device.

In case there is no Internet connection available data will not be lost.

In case of any periphery device failure Cloud server will be notified.



#### 3.0 GETTING STARTED

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Getting Started section explains how to start using Cooler Manager device.

#### 3.1 Installation of Cooler Manager Device to the Place of Sale

- **Step One**: Cut the beer line where you want to measure beer flow.
- **Step Two:** Attach Flow Sensor to the lines. Just plug it in the fast connection.

- **Step Three:** Attach connector from Flow Sensor to the Cooler Manager controller.
- **Step Four:** Attach the power cable cord to the Cooler Manager controller.
- **Step Five:** Close the cover of Cooler Manager box. Make sure it is closed.
- **Step Six:** Power on the power supply.
- **Step Seven:** Now, you should see the numbers on the LCD screen. Insert the SIM card or SD card in dedicated slots if needed. This is optional.
- Step Eight: Measuring can start.

#### 3.2 CoolMan Application

If needed, user can set up precision factor or Brand trough smartphone application.

Log-In to the smartphone app with your credentials.

Credentials are provided by your company. If you do not have them, you can't access the Cooler Manager controller.



4.0 Using the System

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#### 4.0 Using the system

This section provides a detailed description of system functions.

By considering all parameters, impacting physical characteristics we can measure:

• Fluid Volume, total or separated on time scale

• Real Time temperature for each line separately, minimum, maximum temperature, peaks and ice bank (cooler) temperature.

- Type of gas/liquid flowing through lines Gas, fluid or cleaning acid
- CO2 pressure, or CO2 leaking anywhere in the system

• BAT - Barrel attached time – very important parameter that tells the beer company how long the barrel is attached to the beer line, i.e. 2 days, 5 days or much more.

- Brands, i.e. Brand 1, Brand 2 etc.
- Number of controller resets and number of on/off switching.
- Total uptime and session uptime

• Number of taps activation per hour (how many times tap is pulled and average beer pouring by each tap pulling)

- Average beer portions per hour
- Speed of Flow turbine, average per hour
- Voltage on power supply, processor and each turbine
- OLED display for real-time volume monitoring
- Power Supply UPS and Battery

• Two Way Communication - You can give orders and commands to the controllers separately from the server (Remotely change brands, factors and variables, set promotions and time for promotions).

- Auto firmware update
- SD card with a complete history and logs
- Separate volume and special reports for Promotions
- Android and iOS Application set up any parameters and send data easily



5.0 REPORTING



#### 5.0 REPORTING

Reporting section describes in what way information collected by the application are presented and how

to access the information.

#### 5.1 Report Capabilities

With our high line cloud dashboard, management can track every bit of detail about the beer or gas consumption.

Management can track data based on time, place or region. Live data feeds give the much-needed support, to company management and how to extract and manage various data. From Marketing to sales through to maintenance.

The report described in previous section can be accessed by typing http://www.coolbeer.rs in address bar of the Internet browser. You have to log in to access the information. User name and password is the same as used in the application.

#### **FCC Warning**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

#### \*RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **IC Warning**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :

(1) Ce dispositif ne peut causer d'interférences ; et

(2) Ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Ce matériel devrait être installé et utilisé à une distance minimale de 20cm entre les radiateursYour body shop.