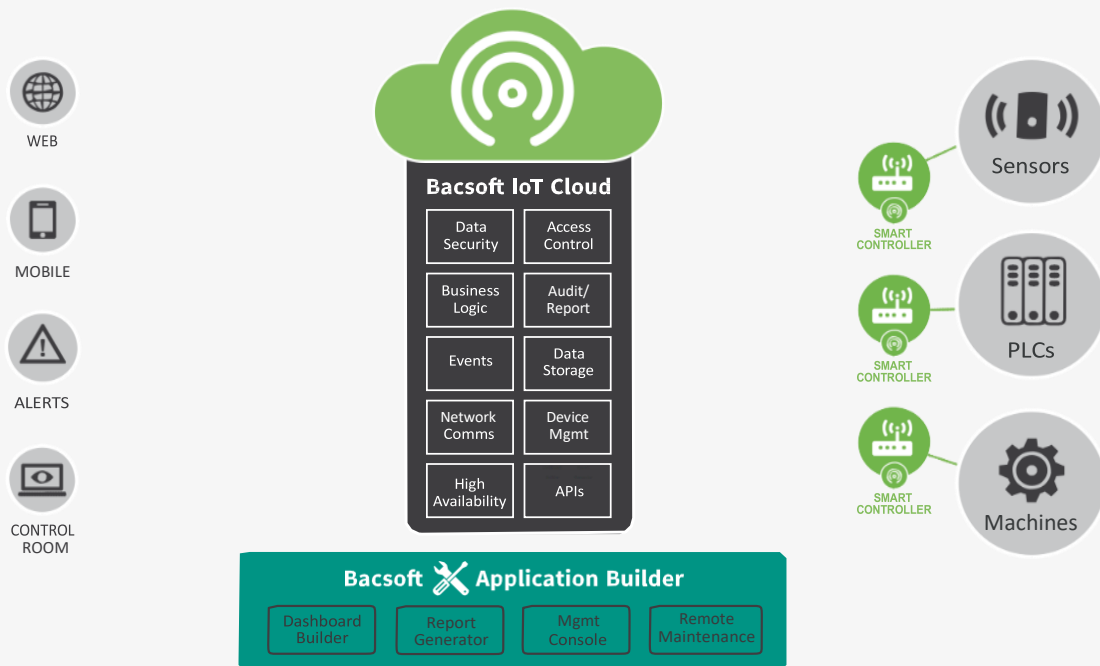


# BACSOFT B-CONNECT ME SMART COMMUNICATIONS CONTROLLER

## BACSOFT IOT PLATFORM

The Bacsoft platform is an end-to-end solution for building and managing advanced IoT and M2M applications. Using Bacsoft, companies can rapidly connect their legacy infrastructure to the Industrial Internet and build applications to remotely monitor and control their operations.

Bacsoft reduces the complexity of IoT projects with a combination of robust and reliable remote connectivity, simple and rapid application development, and scalable cloud services. The platform features:



### M2M COMMUNICATIONS:

Bacsoft B-Connect me Smart Communications Controllers offer built-in support for a wide variety of devices, interfaces and protocols. Designed to operate reliably under all kinds of conditions, the B-Connect me Smart Communications Controller is cost-effective and easy to deploy.

### IOT CLOUD:

The Bacsoft IoT Cloud handles all aspects of communications, application execution, data storage, security and auditing. It easily scales to support thousands of connected devices.

### APPLICATION BUILDER:

Rapid development tools enable integrators and IT organizations to easily build tailored IoT applications without coding and deploy them for mobile, web and control rooms.

# BACSOFT B-CONNECT ME SMART COMMUNICATIONS CONTROLLER: ETHERNET AND 3.5 G CONNECTIVITY FOR LEGACY NETWORKS

The Bacsoft B-Connect Me Smart Communications Controller provides Ethernet connectivity as well as bi-directional cellular communications over 3.5G networks. This compact, yet highly versatile controller provides reliable M2M communications at any site and under all conditions.

Each device manages the connectivity to the server and can adapt to field conditions by initiating communications, performing self-recovery and more. A hardware-based external watchdog ensures that the communications software is running properly at all times, and, in case of an error, reboots the controller.

Bacsoft secures M2M communications with optional SSL 3.0 encryption, along with the option to install private, self-signed certificates. To further increase security and eliminate the need for a fixed IP address, the controller identifies and verifies the server during each connection.

The M Smart Communications Controller can be used to manage virtually any device. It includes built-in support for Modbus and Melsec and is easily adapted to work with any proprietary protocol, binary or ASCII. Where appropriate, one controller can manage a series of devices through a serial RS485 interface, simplifying deployment and eliminating multiple SIM cards.

## FEATURES



Plug & Play Connectivity (easy setup, all wireless)

Always On - refresh rate of data read and data write is around 1 seconds both ways

Includes external hardware watchdog for fail-safe operation

Very Low Data Usage  
(a few megabytes per whole month 24/7 connectivity)

Various Digital Interfaces:  
2 Digital Inputs  
2 Hardware Counter 32 bit

1 RS232/1 RS485  
1 RS232  
1 Ethernet RJ45

Logging Capabilities

Debug and setup using standard SMS messages

OTAP (Over the Air Provisioning) support for software updates

Optional SSL Version 3 with embedded server certificate for secure applications

Option to open a raw tunnel directly to remote equipment

## APPLICATIONS

### INDUSTRY APPLICATIONS



Multi PLC Control  
All Types of Sensors Readings  
(Analog/Digital/ASCII/Binary)

### ENVIRONMENTAL APPLICATIONS



Temperature, Humidity, CO2 (etc) Monitoring  
Forest Fire Detection  
Meteorology Station and Monitoring  
Early Earthquake Detection  
Snow Level Monitoring  
Air Pollution  
More

### SMART CITY APPLICATIONS



Parking Control  
Smart Lighting  
Traffic Control  
Waste Control  
More

### METERING APPLICATIONS



Tank Level (Oil/Gas/Fuel)  
Silos Material Measurement  
Electric/Water Meter Reading

### WATER APPLICATIONS



Remote Control of Valves  
Leak Detection  
Valve Control  
Water Meters (Pulses, Binary, ASCII)  
Water Leakage  
River Height and Flood Alerting  
Swimming Pool Monitoring

### AGRICULTURE APPLICATIONS



Green Houses  
All Type of Irrigations Controllers  
Low-Energy Sensors (Tensitometers etc)  
Hen House / Cowshed Control

### SECURITY APPLICATIONS



Transformer Theft Alarm  
All Types of Security Sensors (Entry, Step-on etc)  
Access Control

## CELLULAR SPECIFICATION

Five Bands UMTS (WCDMA/FDD) Bands: 800, 850, 900, 1900 and 2100 MHz  
Quad-Band GSM Bands: 850, 900, 1800 and 1900 MHz

## SYSTEM SPECIFICATIONS

### POWER REQUIREMENTS

Supply Voltage Range 12-24 VDC

### CURRENT CONSUMPTION

GSM/GPRS Mode 170 mA (Avg) at 12 VDC  
Maximum momentary 250 mA (Avg) at 12 VDC

### MEMORY CHARACTERISTICS

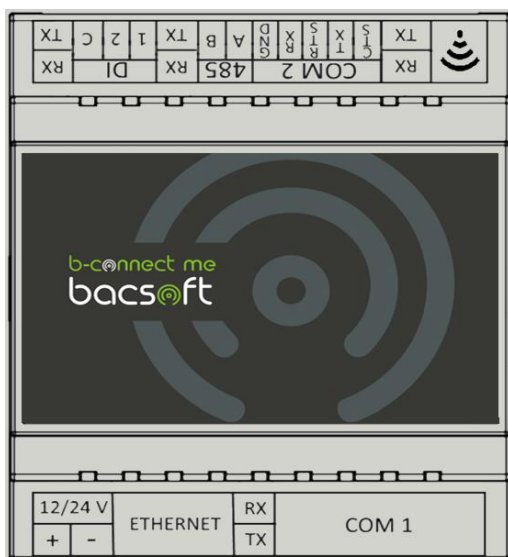
Type Read Write  
Max Storage Capacity Up to 90000 Measurements (in off mode)

### ENVIRONMENTS

Operating Temperature -20°C to 70°C  
Automatic Turn Off 80°C  
Storage Temperature -35°C + 75°C  
Operating Humidity 5% to 95%

### DIMENSIONS/WEIGHT

Dimensions 70 x 86 x 58  
Weight 150g

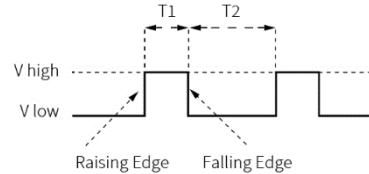


## INTERFACES

2 Isolated Digital Inputs  
(can be configure as Hardware Counters)

### Counter :

T1 minimum is 20MS and maximum unlimited.  
T2 minimum is 20MS also and maximum unlimited.  
The counter is 32 bits.



1 Serial RS-232/1 Serial RS-485 Full Duplex/Half Duplex  
1 Serial RS-232 Full Duplex  
1 Ethernet - RJ45

Antenna Connector SMA Male

SIM card socket Push type

Plug in Backup Battery/Auxiliary Input Terminal Block

LED Indications  
2 LEDs for each communication port RX/TX, System Status  
2 Status LEDs

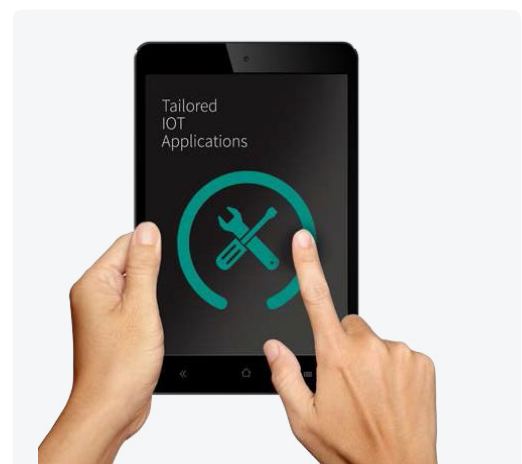
Power Supply Socket Terminal Block

## ADVANCED TECHNICAL INFORMATION

### DIGITAL INPUT CHANNEL SPECIFICATION

Input Range - On 3 - 30V ("1")  
Input Range - Off 0 - 1V ("0")  
Input Resistance 280Kohm  
Over Voltage Protection 50V

Digital inputs can be configured to act as digital counter for use with sensors that generate pulses



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