



CYGSM boards

Features

- Onboard 32-bit ARM® Cortex™-M0 CPU
- Quad-band GSM/GPRS module SIMCOM SIM800C
- External PCB antenna included
- Support external antennas via UFL connector
- 5v input power supply via micro USB connector
- Three input pins supporting GPIO/I2C/UART/analog mode
- Input connector provides separate 3.3V and 5V power supply for sensors
- Three status LEDs on board
- Integrated bootloader
- DFU firmware updates via microUSB
- Over-the-air firmware updates via Cybbed WEB

Introduction

Cybbed CYGSM is a miniature, cost effective GSM/GPRS gateway which provides connectivity between various sensors and the Cybbed WEB platform.

The system is driven by a low power, but efficient ARM® Cortex™-M0 processor that handles communication between device and WEB and processes data from connected sensors. Due to flexible design, input pins can be configured to work with I/O, 1-Wire, I2C, UART or analog sensors.

The Cybbed WEB platform provides convenient user interface for device configuration and sensor data visualization.

Firmware updates can be performed either using PC via DFU protocol or over-the-air from WEB platform.

Applications

- Liquid level measurement
- Distance measurement
- Temperature/humidity/light/etc. monitoring
- Alarm security systems
- Equipment monitoring
- Custom data monitoring

Technical Specification

Product type	GSM/GPRS gateway
Connectivity	
Communication protocol	GSM Quad-band 850/900/1800/1900MHz
Communication module	Simcom SIM800C
Antenna	External antenna via UFL connector
SIM card	3.3V/1.8V micro SIM
Input interface	
Input pinout	1 - Ground 2 - +3.3V 3 - +5V 4 - UART RX / I2C SCL / GPIO 5 - UART TX / I2C SDA / GPIO 6 - Analog / GPIO
Power Input	
Supply voltage	5V
Current consumption	up to 2A (peak consumption)
Connector type	Micro USB
User interface	
Status LEDs	LED 1 - power status LED 2 - GSM status LED 3 - system status
Button	To enter DFU mode
Mechanical	
Dimensions	80mmx40mmx20mm (length x width x height)
Environmental conditions	TBD
IP degree of protection	TBD