

# Introducing the watchdog-ONE...



The quickest way to put your **THING** on the internet!

The **watchdog-ONE** is our budget beating mini computer designed to provide a seamless interface between your production line machinery, and your management staff. **watchdog-ONE** connects to a variety of industrial sensors to monitor and measure operating parameters needed to help measure your Overall Equipment Effectiveness (OEE) score. Using a secure web API, **watchdog-ONE** is able to record accurate and reliable data.

**watchdog-ONE** is designed to work with, but not limited to, our customisable **W3b IoT cloud dashboard platform**, **bigscreen HDMI scoreboard-ONE**, and our **dash-ONE Human Machine Interface panel**.



## Hardware Features

- Xtensa dual-core (or single-core) 32-bit LX6 microprocessor, operating at 160 or 240 MHz
- 2.4 GHz IEEE 802.11 b/g/n WiFi
- v4.2 BR/EDR and BLE
- 520 KiB SRAM, 4MB EEPROM
- Supply Voltage from 10 to 30V DC
- Optional 1200mA/hr battery backup keeps watchdog awake for up to 10 hours
- High speed counter input - up to 50kHz
- RS485 Serial Communication Port
- 4 x Optically-Isolated digital inputs
- 2 x 10-bit Analog to digital convertors (0 to 5v or 4-20mA isolated)
- 2 x 2A 0-30V MOSFET Switching outputs
- High visibility multi-colour LED colour ring for status indications
- 128x64 pixel OLED display screen
- Battery backed-up real time clock for accurate timekeeping
- Tough eco-friendly PLA 3D printed plastic case with DIN rail mounting/slide in bracket
- PT Fused and spike protected output for powering sensors

## Software Features

- Cloud data communication via REST API or MQTT
- Built in Configuration webserver
- Support for 2D Barcode scanner for batch identification
- Support for Biometric fingerprint scanner
- Optional SigFox radio network connection
- Optional 7/10" touch screen available to link several watchdogs to one Human Machine Interface (HMI)



## Typical Applications

- Monitoring of manufacturing plant process controls
- Auditing of factory machine outputs
- Remote monitoring and control of machinery
- Data acquisition and processing
- Machine Operator Surveillance

# w3b



Contact us via [info@w3b.co.za](mailto:info@w3b.co.za), or visit [w3biot.com](http://w3biot.com) for more information