



## Description

The Uberlogger is a simple yet powerful datalogger which logs 8 analog inputs (as temperature or analog signals) and 6 digital inputs to a CSV on an SD card.

- 8 Analog or NTC inputs (selectable)
- 6 digital inputs
- Log frequency from 1 Hz to 250 Hz
- ADC resolution 12-bit or 16-bit
- Voltage range of +/-10V or +/-60V (selectable)
- Works via USB-C powered port (300 mA max.)
- 2.4GHz Wi-Fi connection modes
  - Access point
  - Client mode (connect to access point)
  - Both modes can be active simultaneously
- Web interface
  - Max. 1 Hz live data view of the channels
  - Start / stop logging
  - Configure settings
- Two physical buttons: one for starting and stopping logging, one to reset
- 2 LEDs: log status (green) and error state (red)
- REST API control for start/stopping logging and retrieving data
- RTC clock to keep track of time which is also stored in the CSV as UTC time (no time zone)
  - Will be synced to your PC's time through the web interface
  - Lithium battery on the board to keep time running when power is off.
- 1x USB-C cable and 1x NTC included
- Firmware upgradable for new features

## Electrical specifications

Parameter	Description	Value
<b>Electrical characteristics</b>		
Supply voltage		4.75 V ... 5.25 V
Supply current		300 mA (max)
<b>Analog input characteristics</b>		
Input voltage range	Selectable	-10 V ... +10 V -60 V ... +60 V
Input impedance		100 kOhm (min)
Input accuracy		+/-0.5%
ADC resolution	Selectable	12-bit 16-bit
Analog filter	Analog anti-aliasing filter cut-off frequency (1st order)	5 kHz
Digital filter on analog inputs	Digital anti-aliasing filter cut-off frequency (1st order) Active in 16-bit mode only	$f_{\text{sample}}/2$
Input protection	Over-voltage protection	clamped
<b>Digital input characteristics</b>		
Input voltage range		-60 V ... +60 V
Input impedance		100 kOhm
Analog filter	Analog de-bounce filter cut-off frequency (1st order)	100 kHz
Input LOW	Voltage to read digital read LOW (false)	1.0 V
Input HIGH	Voltage to read digital read HIGH (true)	2.0 V
Input protection	Over-voltage protection	Clamped
<b>Connectivity/interfaces</b>		
NTC type		10 kOhm @ 25 °C, beta=3950
NTC connector		JST-XH
Wi-Fi		802.11 b/g/n
Wi-Fi supported frequencies		2.4GHz
Wi-Fi security		WPA2 personal
USB-Port-C		Only used for power
SD-Card		MicroSD Up to 32GB FAT only Max file size 4GB
<b>Mechanical</b>		
Dimensions (outer)		148x77x23 mm (approximately)
Enclosure type		Board stack with descriptive silkscreen