Features

- Low Cost.
- Board works with 5V.
- Controller operates on 3.3V.
- Data Conversion rate of 100mseconds.
- Available in I2C/UART two wire Output modes.
- Can attach 4 pins 1 load cell or 3 pins 4 load cells.

I2C Protocol

The I2C Protocol Frame Format is as follows. The module is configured as slave device. To read from module send the Slave Address 0×44, followed by read/write bit High to read from the module. After acknowledgment received, the module sends the 4 bytes of 32 bit weight sensor raw reading in MSB first format.

Start	7 bit Address	R/W	ACK/ NACK	MSB byte	ACK/ NACK	2nd MSB byte

ACK/ NACK	3rd MSB byte	ACK/ NACK	LSB byte	ACK/ NACK	Stop

1: I2C Frame Format to read from Module

UART Frame Format

The UART Protocol Frame Format is as follows. Configure the UART for 115200, 8 Bits, No parity, 1 stop bit. The module is configured as slave device.
To read from module send 'R'. The module sends total 8 bytes of data that is 4 bytes (32 bit) of raw value data and 4 byte (32 bit) of calibrated actual readings in float of weight sensor reading in MSB first format.

Start	8 bit address	MSB byte	2nd MSB byte	3rd MSB byte	4th MSB byte	5th MSB byte	6th MSB byte	7th MSB byte	LSB byte	Stop

2: UART Frame Format to read from Module

32 bit of raw value = raw value of weight sensor – offset
where, raw value is 24 bit value received from weight sensor offset is the raw value read at no weight

32 bit of calibrated actual reading = raw value / scale value
where, raw value is value received from weight scale value is calibration value to convert raw reading to unit readings(e.g., Kg)

To tare zero the weight reading send ‘T’. The module sets weight reading to 0.

To calibrate the scale unit, Keep weight on scale and send ‘C’ followed by float value to module which in MSB first format. For e.g. if we keep 1Kg weight on scale and want to set in kg then send ‘C’ followed by (1000.0).

Module Dimensions

1: All Dimensions in mm