

BASSO-1070TW/ioWiFi

RTD, Relay, Analog, Digital, In/Out to WiFi Sensor Node



BASSO-1070TW is a dual-band WiFi Sensor Node with IEEE 802.11 a/b/g/n supporting Infrastructure and Soft AP mode, which can be conveniently used depending on the use-desired modes. It also supports easy software setup, RS232 console port and RS485 communication port with communication speed of up to 921.6Kbps and wireless encryption modes such as WEP, WPA-PSK, WPA2-PSK and Enterprise.

The BASSO-1070TW is an ODMU(One-Device-Multi-Use) device that provides functions for various use requirements such as data collection, control and monitoring of a variety of instrumentation and sensors in the industrial field by providing Relay output for ON/OFF, Digital Input/Output, Analog Input and RTD, which are widely used in the control area.

Overview

Wireless Serial Network

Supports wireless(Dual-WiFi 2.4GHz/5GHz) transmission/reception of RS232/485 serial data.

Various I/O Ports

Digital Input/Output, Analog Input, Relay, RTD ports are provided.

Easy Configuration

Users can easily set up the equipment using the setup utility.

BASSO-1070TW/ioWiFi Specification Sheet

WiFi	Frequency		2,412 ~ 2,462 MHz, 5,150 ~ 5,250 MHz, 5,725 ~ 5,850 MHz
	Standard		IEEE 802.11 a/b/g/n
	ANT		Dipole Antenna / Avg 1.5dBi/2.4GHz, -0.7dBi/5GHz
	Mode		Station, Peer to Peer
Serial	Serial Port		2 Port (RS232 Console(DB9) 1EA, RS485(TB) 1EA)
	Speed		Max 921.6kbps
	Data bit		8
	Stop bit		1
	Parity bit		None, Even, Odd
	Signals		RS-232: TXD, RXD RS-485: TRXD+, TRXD-
Communication	Digital Input	Input Voltage Range	10 ~ 26 VDC
		Input Current	5mA@12VDC 11mA@24VDC
	Digital Output	Maximum Voltage	12 ~ 36 VDC
		Maximum Current	100mA/Ch
		Vceon	Max. 1.1VDC
	Analog Input		16bit Resolution, 0(4) ~ 20mA, 0(5) ~ 10V
	RTD		Resistance temperature detector
	Relay Output	Logic Voltage	25 VDC
		Logic Current	42 mA
		Max. Current	0.5A@220VAC 1A@28VDC

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Specifications subject to change without notice



BASSO-1070TW/ioWiFi Specification Sheet

Hardware	Dimension (W x L x H)	101.8 x 82.6 x 26.7mm (4.01 x 3.25 x 1.05in)
	Weight	230.7g (8.14oz)
	Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)
	Humidity	Max 95% R.H
	INPUT POWER	DC 12~48V
	FIELD POWER	DC 12~24V (2 contacts)
	LED	RTD, DI2, DO2, 232, Wireless (Yellow), RO, AI, DI1, DO1, RDY, 485 (Green)
Software	Protocol	COM Redirect, TCP Server/Client, UDP, Modbus TCP, Modbus RTU/ASCII
	Security	WEP, WPA-PSK, WPA2-PSK, WPA-Enterprise, WPA2- Enterprise
	Support	TCP No-Delay Mode, TCP KeepAlive
	Configuration	IOWiFi Config
Ordering Information		BASSO-1070TW/ioWiFi, Manual, Wall Mount Bracket

BASSO-1070TW/ioWiFi Specification Sheet

Mode	Target Power [dBm]	Allowed Tolerance [dB]	Max Tune Up Power [dBm]	Measured Power [dBm]
b_Lowest_ANT 0	13	1	14	13.40
b_Middle_ANT 0	13	1	14	13.32
b_Highest_ANT 0	13	1	14	13.13
g_Lowest_ANT 0	18	2	20	18.03
g_Middle_ANT 0	18	2	20	18.09
g_Highest_ANT 0	18	2	20	18.00
n20_Lowest_ANT 0	18	2	20	19.19
n20_Middle_ANT 0	18	2	20	18.95
n20_Highest_ANT 0	18	2	20	18.84

Mode	Target Power [dBm]	Allowed Tolerance [dB]	Max Tune Up Power [dBm]	Measured Power [dBm]
U-NII-1 / a_Lowest_ANT 0	9	2	11	9.97
U-NII-1 / a_Middle_ANT 0	9	2	11	10.25
U-NII-1 / a_Highest_ANT 0	9	2	11	10.38
U-NII-1 / n20_Lowest_ANT 0	9	2	11	9.44
U-NII-1 / n20_Middle_ANT 0	9	2	11	9.77
U-NII-1 / n20_Highest_ANT 0	9	2	11	10.02
U-NII-2A / a_Lowest_ANT 0	10	2	12	10.35
U-NII-2A / a_Middle_ANT 0	10	2	12	11.21
U-NII-2A / a_Highest_ANT 0	10	2	12	11.49
U-NII-2A / n20_Lowest_ANT 0	9	2	11	9.34
U-NII-2A / n20_Middle_ANT 0	9	2	11	10.28
U-NII-2A / n20_Highest_ANT 0	9	2	11	10.12
U-NII-2C / a_Lowest_ANT 0	9	2	11	10.52
U-NII-2C / a_Middle_ANT 0	9	2	11	9.80
U-NII-2C / a_Highest_ANT 0	9	2	11	9.16
U-NII-2C / n20_Lowest_ANT 0	8	2	10	9.51
U-NII-2C / n20_Middle_ANT 0	8	2	10	9.31
U-NII-2C / n20_Highest_ANT 0	8	2	10	8.70
U-NII-3 / a_Lowest_ANT 0	7	2	9	8.60
U-NII-3 / a_Middle_ANT 0	7	2	9	8.22
U-NII-3 / a_Highest_ANT 0	7	2	9	7.92
U-NII-3 / n20_Lowest_ANT 0	7	2	9	8.61
U-NII-3 / n20_Middle_ANT 0	7	2	9	7.85
U-NII-3 / n20_Highest_ANT 0	7	2	9	7.88

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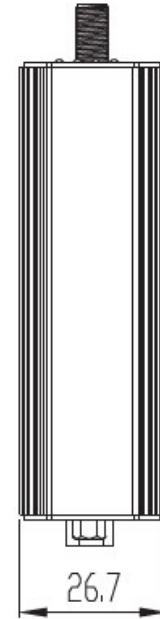
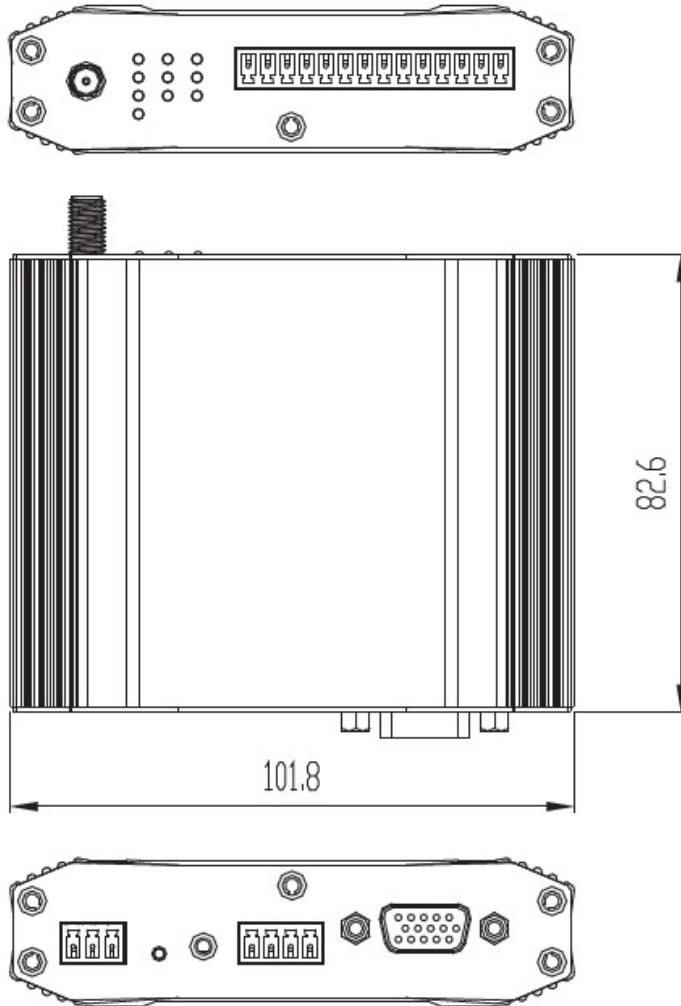
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Dimension



unit : mm

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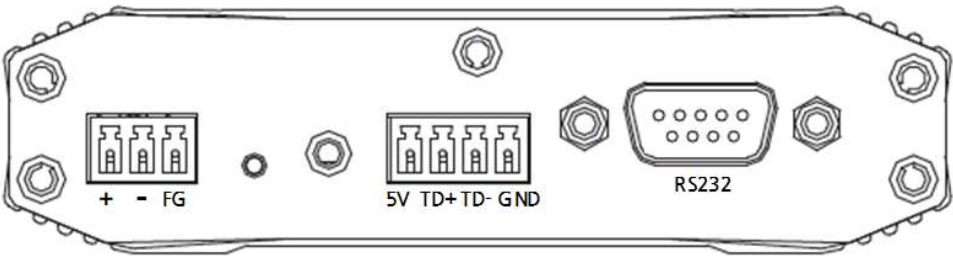
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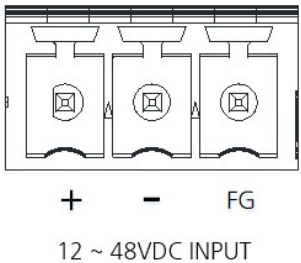
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Pin Assignment



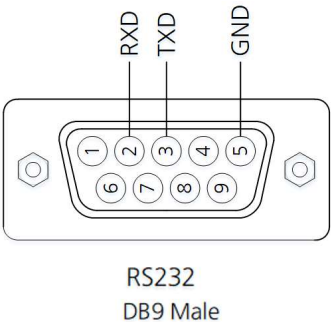
Power Pin Specification



Pin	Description
V+	Power Input
V-	Power Input
FG	Frame Ground

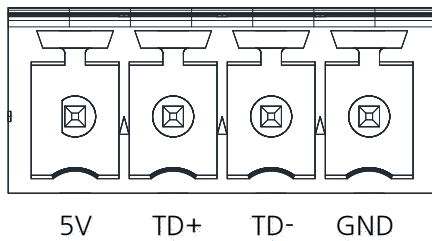
* Non-polarized terminal

RS232 Pin Specification



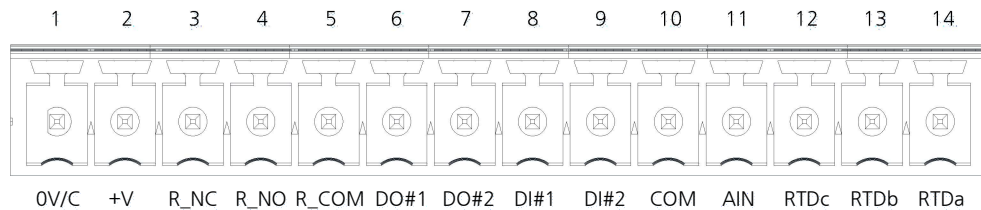
Pin	Description
RXD	Receive Data
TXD	Transmit Data
GND	Ground

RS485 Pin Specification



Pin	Description
5V	5V Output (500mA)
TD+	Transmit/Receive Data +
TD-	Transmit/Receive Data -
GND	Signal Ground

I/O Port Pin Specification



Pin	Description
0V/C	Ground Terminal (Field Ground)
+V	12~24VDC voltage + Terminal (12~24VDC)
R_NC	Initial status of Relay (Relay Normally Closed)
R_NO	Operate when status of Relay is changed (Relay Normally Open)
R_COM	Relay Ground Terminal (Relay Common)
DO#2	DO Port2 (Digital Output #2)
DO#1	DO Port1 (Digital Output #1)
DI#2	DI Port2 (Digital Input #2)
DI#1	DI Port1 (Digital Input #1)
A_COM	Analog Ground Terminal (Analog Common)
AIN	Analog Input Terminal (Analog Input)
RTDc	RTD Lo
RTDb	RTD Lo
RTDa	RTD Hi