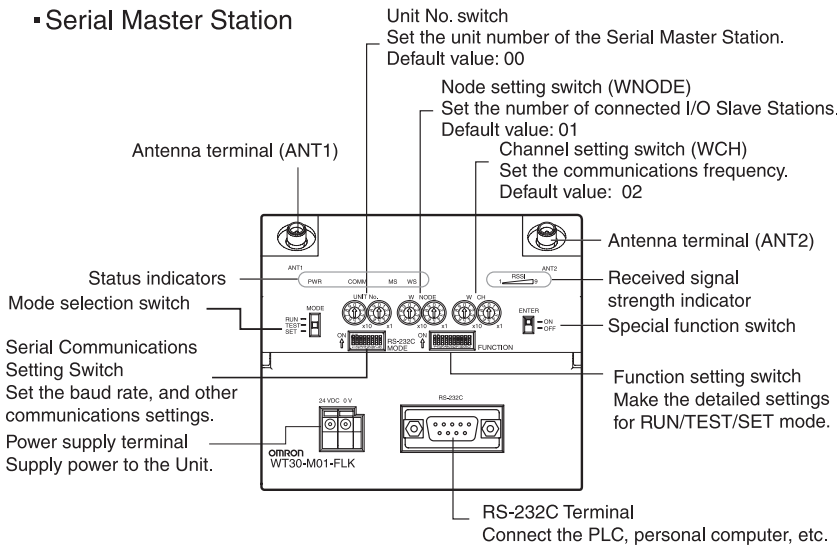
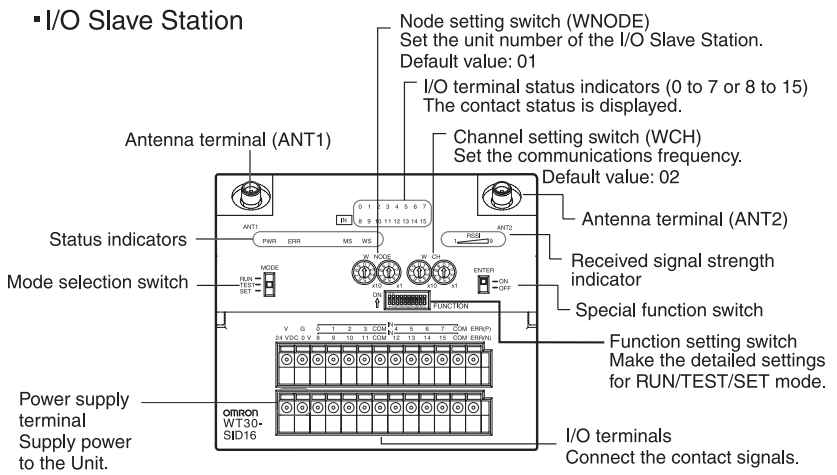


Names of Parts

Serial Master Station

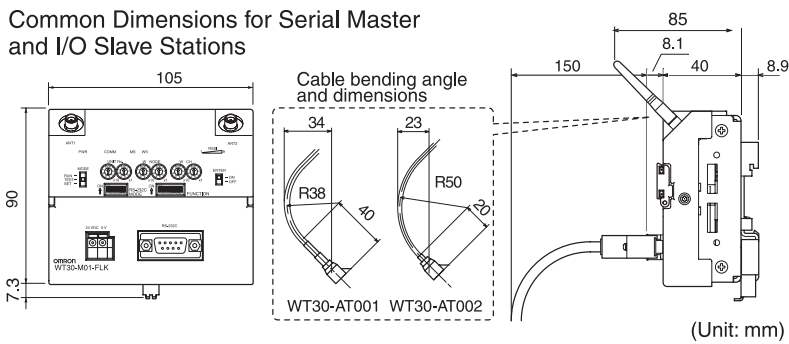


I/O Slave Station



Dimensions

Common Dimensions for Serial Master and I/O Slave Stations



Display

Indicator	Color	Status	Meaning (primary error)
PWR	Green	Lit	Power is being supplied.
		Not lit	Power is not being supplied.
ERR (I/O Slave Station)	Red	Lit	Error output ON: Wireless device error or wireless communications error.
		Not lit	Error output OFF
COMM (Master Station)	Yellow	Lit	Serial communications in progress.
		Not lit	No serial communications.
0 to 15 (I/O Slave Station)	Yellow	Lit/Not lit	ON/OFF status for input or output signals
RSSI	Red/Yellow/Green	Lit/All not lit	Received Signal Strength Indicator monitor: Number of indicators lit (received signal strength 1 to 9) Received signal strength less than 0 to 1.
		Green	Communications are normal.
		Flashing	TEST mode or SET mode has been activated.
		Red	Lit: A fatal error has occurred that cannot be recovered from. Replace the WT30 Terminal. Flashing: A non-fatal error has occurred that can be recovered from by resetting the system.
MS (Module Status)	Green	Lit	The station has joined the wireless network.
		Flashing	Permission to join wireless network received from Serial Master Station (Slave Stations)
		Red	Lit: A fatal error has occurred that cannot be recovered from. Flashing: Error from which recovery is possible.
WS (Wireless Status)	Green	Lit	The station has joined the wireless network.
		Flashing	Permission to join wireless network received from Serial Master Station (Slave Stations)
---	---	Lit	A fatal error has occurred that cannot be recovered from.
		Flashing	Error from which recovery is possible.
---	---	Not lit	Wireless communications are not in progress.

Function Setting Switch

Serial Master Station

Applicable mode	ON functions	OFF functions
1 RUN mode	Holds I/O status data when a communications error occurs. Enables scan list	Clears I/O status data when a communications error occurs. Disables scan list
2	Relays used	Relays not used
4 TEST mode	Signal strength monitor disabled All channels automatically selected	Signal strength monitor enabled Specified channel selected
5	---	---
7 SET mode	Scan list recognition Registers specified I/O Slave	Nothing done Registers all I/O Slaves automatically
8	Recognizes serial numbers (See note.)	Ignores serial numbers
10 Not used	---	---

Note: The serial number refers to the product's unique number.

I/O Slave Station

No.	Applicable mode	ON functions	OFF functions
1 RUN mode	Holds I/O status data when a communications error occurs.	Clears I/O status data when a communications error occurs.	
2	Input hold	Normal mode	
3	Input filter: 100 ms	Input filter: 10 ms	
4 TEST mode	Signal strength monitor disabled All channels automatically selected	Signal strength monitor enabled Specified channel selected	
5	Installation test function	Nothing done	
7 to 10	Not used	---	

Serial Communications Setting Switch

No.	Function	ON	OFF
1	Communications setting selection	Detailed settings (settings for No. 2 to 8 used)	0
2	Baud rate (bps) (See note.) Total value = 0: 1,200 = 1: 2,400 = 2: 4,800 = 3: 9,600 = 4: 19,200 = 5: 38,400 = 6: 57,600 = 7: 115,200	1	0
		2	0
		4	0
		0	0
5	Data length	8 bits	7 bits
6	Parity	None	Yes
7		Odd	Even
8	Stop bits	1 bit	2 bits

Note: For example, if pins number 2, 3, and 4 are all ON, the total is 7, which corresponds to a baud rate of 115,200 bps.

Received Signal Strength Indicator

Field strength	Weak	Medium	Strong
Number of levels	0	1 2 3 4	5 6 7 8 9
RUN mode	Unstable communications range		Stable communications range
TEST mode	Unstable communications range		Stable communications range
Field strength monitor	Range in which specified channel can be used.	Range in which specified channel cannot be used.	
Installation/confirmation range	Unstable communications range	Stable communications range	

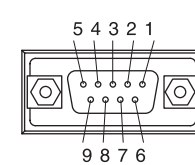
The received signal strength is indicated using 10 levels. Check the communications status, referring to the field strength level.

Frequency Table

CH	WCH setting		Center frequency (MHz)	CH	WCH setting		Center frequency (MHz)
	x 10	x 1			x 10	x 1	
				51	5	1	2402.2
2	0	2	2403.4	52	5	2	2404.6
3	0	3	2405.8	53	5	3	2407.0
4	0	4	2408.2	54	5	4	2409.4
5	0	5	2410.6	55	5	5	2411.8
6	0	6	2413.0	56	5	6	2414.2
32	3	2	2475.4	82	8	2	2476.6
33	3	3	2477.8	83	8	3	2479.0
34	3	4	2480.2				

Channels 0, 1, 35 to 50 and 84 to 99 cannot be set.
Channels 51 cannot be used in China.

RS-232C Connector

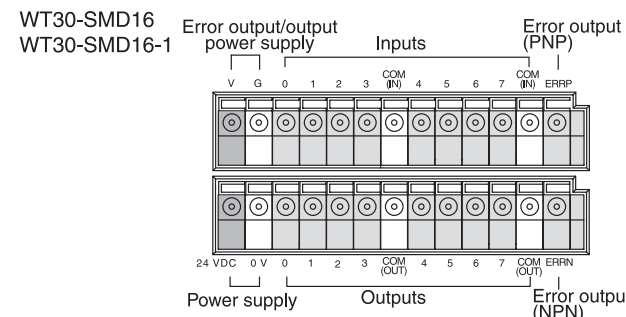
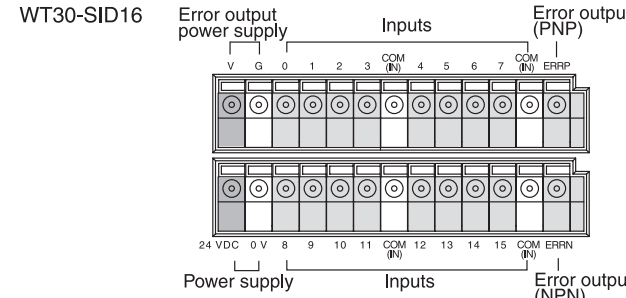


D-sub, 9-pin, Female End at WT30

Pin No.	Signal	I/O direction
1	---	---
2	RD	Output
3	SD	Input
4	---	---
5	SG	---
6	---	---
7	---	---
8	---	---
9	---	---

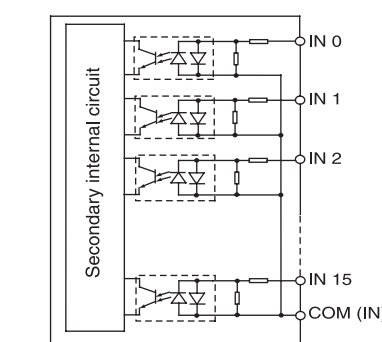
I/O Characteristics

I/O Slave Station

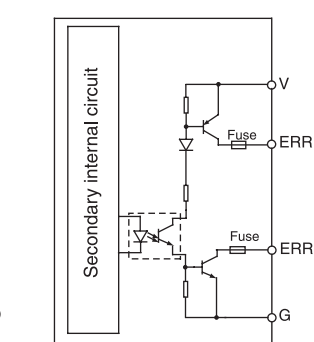


Item	Specifications
Input voltage	24 VDC
Allowable voltage range	20.4 to 26.4 VDC
Input impedance	4.7 kΩ (typical)
Input current	5 mA (typical)
ON voltage/current characteristics	17.4 VDC, 3.0 mA min.
OFF voltage/current characteristics	5.0 VDC, 1.0 mA max.
Input filter	10 ms/100 ms (Depends on the software used. Selected using switch.)
Input voltage	24 VDC
Allowable voltage range	20.4 to 26.4 VDC
Max. switching current	100 mA max. per output (at 20.4 to 26.4 VDC) Simultaneous usage of error output NPN/PNP is not possible.
Leakage current	0.1 mA max.
Residual voltage	1.0 V max.
Fuse	One for every two outputs except for error output circuits, which have one for every NPN/PNP output. (No fuses can be replaced by the user.)

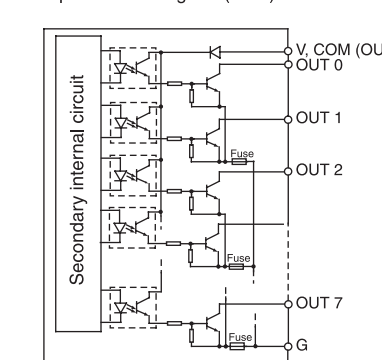
Input Circuit Diagram



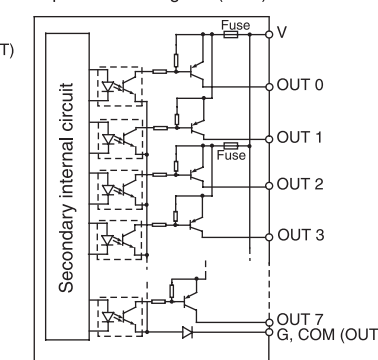
Error Output Circuit Diagram



Output Circuit Diagram (NPN)

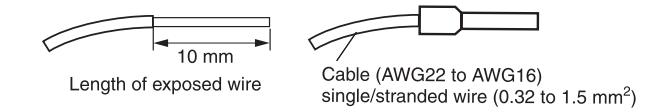


Output Circuit Diagram (PNP)



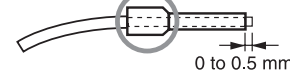
Wiring Precautions

- Wire the signal lines separately from power lines to prevent noise interference.
- Do not lay wiring close to the antenna.
- Turn OFF the power before performing any wiring.
- Wire the terminals using the following post terminals and cables.

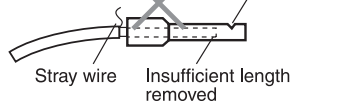


- Use a tool of the appropriate size to crimp the post terminal. Make an incision in the cable and remove the covering so that the cable is either the same length as or approximately 0.5 mm longer than the post terminal, as shown in the following diagram. Make sure that no stray wires are protruding and the post terminal is not damaged.

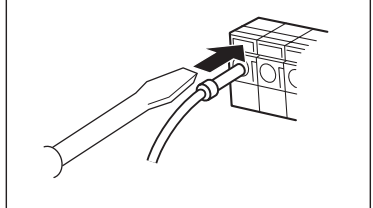
Correct Example



Incorrect Example

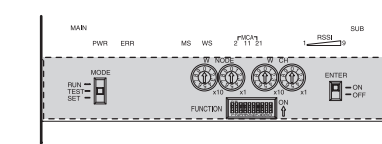


Insert a screwdriver into the screwless terminal block as shown below, and keeping the screwdriver inserted, pull out the post terminal.



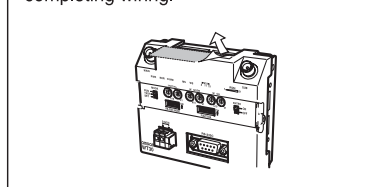
Attaching Terminal Labels (I/O Slaves Only)

Attach terminal labels to the positions shown in the following diagram.



Dust-proof Label

Remove the dust-proof label after completing wiring.



EC DECLARATION OF CONFORMITY

We hereby declare that the following product is in conformity with the requirements of the following EC Directive:

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