FA Wireless SS Terminals WT30

Construct a Wireless System for ON/OFF Data Collection That Is Ideal for Monitoring Production Site Equipment

- Wireless Slave Station equipped with I/O.
- Height of 90 mm and DIN Rail mounting enables installation in control panels.
- Easily check wireless communications status from indicator display.
- I/O Slave Stations can also be used as Slave Stations in WD30 systems.
- Conforms to radio wave standards for Japan, China (pending), USA, and Europe.



Ordering Information

■ List of Models

Wireless Unit model	Туре	Specifications/No. of I/O points	
WT30-M01-FLK	Serial master	RS-232C	
WT30-SID16	I/O slaves	16 DC inputs (NPN/PNP)	
WT30-SMD16		8 DC inputs (NPN/PNP) + 8 transistor outputs (NPN)	
WT30-SMD16-1		8 DC inputs (NPN/PNP) + 8 transistor outputs (PNP)	

Note: An Antenna and Mounting Brackets are not included with the Wireless SS Terminal.

Accessories

Antennas

Model	Туре	
WT30-AT001	Magnet-base Antenna (2 antennas per set)	
WT30-AT002	Flat Diversity Antenna (1 antenna)	
WT30-AT003	Pencil Antenna (2 antennas per set)	

Communications Cables

Model	Length	Application
XW2Z-0100U-3	1 m	For personal computer
XW2Z-0200U-3	2 m	
XW2Z-0500U-3	5 m	
XW2Z-0200U-5	2 m	Cross cable for PLC
XW2Z-0500U-5	5 m	

Other

Model	Туре
WT30-FT001	DIN Rail Mounting Bracket (for TH35-7.5)
WT30-FT002	DIN Rail Mounting Bracket (for TH35-15)
WT30-FT003	Surface Mounting Bracket (screw-mounting) (2 brackets per set)
WT30-FT011	Flat Diversity Antenna Mounting Brackets (with magnets)
WT30-CA2M	Antenna Extension Cable (1 cable, 2 m)

Applicable Standards

- FCC part 15.247 (USA)
- EN 300 440-2 (Europe)
- ARIB STD-T66 (Japan)
- 信部無[2002] 353号 (China) (approval pending)

Conformity to Safety Standards

Always use a Class 2 power supply to conform to UL standards.

Main Class 2 Power Supplies OMRON Switching Power Supplies

- S8VS (15 W, 30 W, 60 W type)
- S82K (15 W, 30 W, 50 W, 90 W type)

Conformity to EN Standards

Use a DC power line less than 3 m to conform to EN standards. If a power line of 3 m or longer is required, extend the length at the Switching Power Supply's primary side (i.e., the AC power line).

Applicable Countries

Wireless standards have been met for the following countries. The product cannot be used in any other countries.

Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungry, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK, USA

Specifications

■ Ratings

Supply and chassis Supply and all I/O and I/O power supply between the power supply and chassis	Item		WT30-M01-FLK Serial Master	WT30-M01-FLK Serial Master WT30-SID16/SMD16-1 I/O Slaves		
Allowable voltage range 20.4 to 26.4 V DC		Rated voltage	24 V DC			
Power consumption 3 W max. (See note 1.)	communications		20.4 to 26.4 V DC			
Construction Con	,,,	Power consumption	3 W max. (See note 1.)			
Insulation resistance 20 MΩ min. (at 100 V DC) between the power supply and all I/O and I/O power supply and chassis 1,500 V AC for 1 min between power supply and chassis 1,500 V AC for 1 min between the power supply and chassis 1,500		Rated voltage		24 V DC		
Supply and chassis Supply and all I/O and I/O power supply between the power supply and chassis				20.4 to 26.4 V DC		
Ambient operating humidity 25% to 85% (with no condensation or icing) Ambient environment No corrosive gases Storage temperature Power supply and I/O Serial Power supply and I/O Serial See note 2.) and all I/O and I/O power supply and bet the power supply and chassis and all I/O and I/O power supply and bet the power supply and chassis and all I/O and I/O power supply and bet the power supply and	Insulation resistance			$20~\text{M}\Omega$ min. (at 100 V DC) between the power supply and all I/O and I/O power supply and between the power supply and chassis		
Vibration resistance (See note 2.) JIS C0040 Frequency: 10 to 55 Hz; Amplitude of 0.35 mm or acceleration of 50 m/s², whichever is si (DIN Rail mounting: single amplitude of 0.1 mm or acceleration of 15 m/s²) 10 sweeps of 8 min each (i.e., 80 min in total) in X, Y, Z directions	Dielectric strength			1,500 V AC for 1 min between the power supply and all I/O and I/O power supply and between the power supply and chassis		
Frequency: 10 to 55 Hz; Amplitude of 0.35 mm or acceleration of 50 m/s², whichever is st (DIN Rail mounting: single amplitude of 0.1 mm or acceleration of 15 m/s²) 10 sweeps of 8 min each (i.e., 80 min in total) in X, Y, Z directions Shock resistance Conforms to JIS C0041: 300 m/s² 3 times each in X, Y, and Z directions -10 to 55°C (with no condensation or icing) (with the Terminal mounted with the dust-proof label facing up) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) (with the Terminal mounted with the dust label facing up) Ambient operating humidity 25% to 85% (with no condensation or icing) Ambient environment No corrosive gases Storage temperature -25 to 65°C (with no condensation or icing) Protective structure Terminal construction Power supply and I/O Screwless terminal block (Phoenix Contact FFKDS/V1-5.08 or equivalent) Name of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) Number of simultaneously ON I	Noise immunity		IEC61000-4-4. 1 kV (power supply line)			
Ambient operating temperature Ambient operating temperature -10 to 55°C (with no condensation or icing) (with the Terminal mounted with the dust-proof label facing up) Number of simultaneously ON I/O points 10 max.: -10 to 55°C (with no condensation or icing) 10 max.: -10 to 55°C (with no condensation or icing) 16 max.: -10 to 50°C (with no condensation or icing) 16 max.: -10 to 50°C (with no condensation or icing) 16 max.: -10 to 50°C (with no condensation or icing) 17 max.: -10 to 50°C (with no condensation or icing) 18 max.: -10 to 50°C (with no condensation or icing) 19 max.: -10 to 50°C (with no condensation or icing) 19 max.: -10 to 50°C (with no condensation or icing) 10 max.: -10 to 50°C (with no	Vibration resistance (See note 2.)		Frequency: 10 to 55 Hz; Amplitude of 0.35 mm or acceleration of 50 m/s ² , whichever is smaller (DIN Rail mounting: single amplitude of 0.1 mm or acceleration of 15 m/s ²)			
(with the Terminal mounted with the dust-proof label facing up) 10 max.: -10 to 55°C (with no condensation group) 10 max.: -10 to 50°C (with no condensation group) 10	Shock resistance		Conforms to JIS C0041: 300 m/s ² 3 times each in X, Y, and Z directions			
Ambient environment Storage temperature Protective structure Terminal construction Power supply and I/O Serial D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station No corrosive gases -25 to 65°C (with no condensation or icing) IP20 Terminal construction D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station	Ambient operating temperature		(with the Terminal mounted with the dust-proof	icing) 16 max.: -10 to 50°C (with no condensation or icing) (with the Terminal mounted with the dust-proof		
Storage temperature Protective structure Terminal construction Power supply and I/O Screwless terminal block (Phoenix Contact FFKDS/V1-5.08 or equivalent) Serial D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station	Ambient operating hum	idity	25% to 85% (with no condensation or icing)			
Protective structure Terminal construction Power supply and I/O Screwless terminal block (Phoenix Contact FFKDS/V1-5.08 or equivalent) Serial D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station	Ambient environment		No corrosive gases			
Terminal construction Power supply and I/O Screwless terminal block (Phoenix Contact FFKDS/V1-5.08 or equivalent) Serial D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station	Storage temperature		-25 to 65°C (with no condensation or icing)			
Serial D-sub, 9-pin (female) Inch screws (OMRON XM2F-0910-132 or equivalent), Master station	Protective structure		IP20			
XM2F-0910-132 or équivalent), Master station	Terminal construction Power supply and I/O		Screwless terminal block (Phoenix Contact FFKDS/V1-5.08 or equivalent)			
only		Serial				
Safety standards UL: UL508 (Listing)	Safety standards		UL: UL508 (Listing)			
Weight 330 g max.	Weight		330 g max.			

Note: 1. Provide a power supply of at least 15 W, considering the inrush current generated at startup.

2. Use the WT30-FT003 Surface Mounting Bracket when installing the WT30 in environments subject to vibration.

■ Wireless Interface Specifications

Item	Specifications	
Wave type	Spread Spectrum (direct sequence; DS-SS)	
Communication method	Simplex	
Frequency band	2,401 to 2,480.2 MHz	
Number of channels	67 channels (based on switching)	
Transmitter output power	10 mW/MHz	
Baud rate between wireless stations	100 kbps	
Communications distance (See note.)	Indoors: 60 m min. (approx. 50 m min. with Magnet-base Antennas and Flat Diversity Antenna Outdoors: Approx. 300 m min. (anticipated distances) (without using relay stations)	
Error detection method	CRC-CCITT (16 bits)	
Relay functions	One stage using I/O slave for the serial master configuration.	
Number of stations per area (See note.)	10 sets max. (recommended)	
Number of I/O Slaves connected	64 max.	

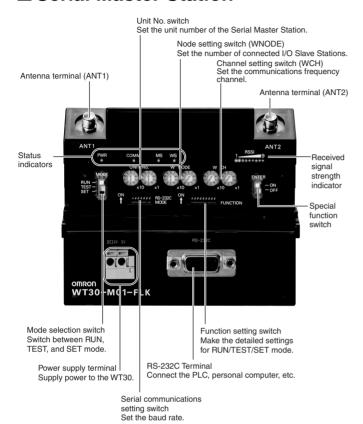
Note: Varies according to the installation environment.

■ Package Contents

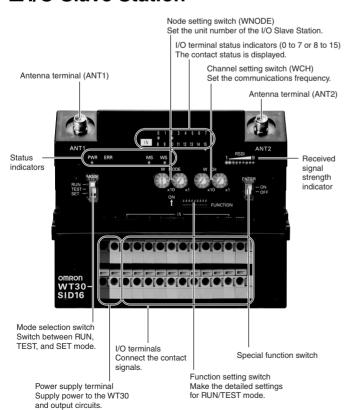
- WT30 FA Wireless SS Terminal
- Terminal labels (I/O Slaves only)
- Instruction Sheet
- Adhesive non-slip feet (Serial Master only)

Nomenclature

■ Serial Master Station



■ I/O Slave Station



■ Unit No. Switch

Set the unit number of the Serial Master Station Default: 00

■ Node Setting Switch (WNODE)

Set the number of connected I/O Slave Stations. Set the node number of the Slave Stations being used as I/O Slave Stations. The Slave Station functions as a relay station when the node number is set to 99.

Default: 01

■ Channel Setting Switch (WCH)

Set the communications frequency.

Default: 02

■ Function Setting Switch

Serial Master 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		Enable scan list	Disable scan list
3		Relays used	Relays not used
4	TEST mode	Signal strength monitor disabled	Signal strength monitor enabled
5		All channels automatically switched	Specified channels
6			
7	SET mode	Scan list recognition	Nothing done
8		Registers specified I/O slave	Registers all I/O slaves automatically
9		Recognizes serial numbers	Ignores serial numbers
10	Not used		

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	Signal strength monitor enabled
5		All channels automatically switched	Specified channels
6		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)	Default settings (baud rate: 9,600 bps; data length: 7 bits; parity: even; stop bits: 2) Settings for No. 2 to 8 are ignored.
2	Baud rate (bps)	1	0
3	(See note.)	2	0
4	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	4	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.

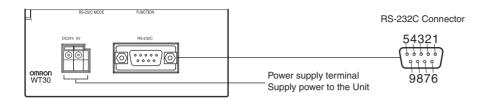
■ Display

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

Note: When using the WD30 as the Serial Master Station, the ERR indicator will light if normal I/O communications are not possible due to an error in the host network.

Wiring

■ Serial Master Station (WT30-M01-FLK)



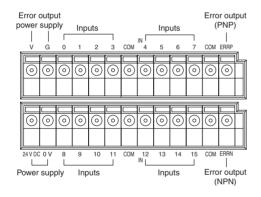
D-sub, 9-pin, Female End at WT30

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

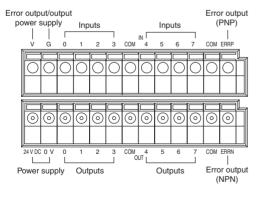
I/O Characteristics

■ I/O Slave Station

WT30-SID16

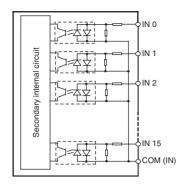


WT30-SMD16 WT30-SMD-16-1

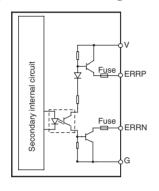


	Item	Specifications	
	Input voltage	24 V DC	
ý	Allowable voltage range	20.4 to 26.4 V DC	
ristic	Input impedance	4.7 kΩ (typical)	
scte	Input current	5 mA (typical)	
Input Characteristics	ON voltage/ current characteristics	17.4 V DC, 3.0 mA min.	
lubi	OFF voltage/ current characteristics	5.0 V DC, 1.0 mA max.	
	Input filter	10 ms/100 ms (Selected using switch.)	
	Input voltage 24 V DC		
	Allowable voltage	20.4 to 26.4 V DC	
Output/Error Output Characteristics	Max. switching current	100 mA max. per output (at 20.4 to 26.4 V DC) Simultaneous usage of error output NPN/PNP is not possible.	
/Error	Leakage current	0.1 mA max.	
utput	Residual voltage	1.0 V max.	
0	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.)	

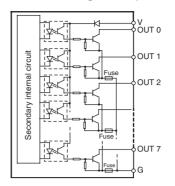
Input Circuit Diagram



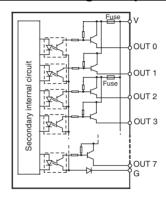
Error Output Circuit Diagram



Output Circuit Diagram (NPN)



Output Circuit Diagram (PNP)

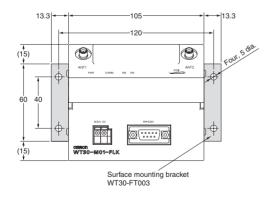


Dimensions

Note: All units are in millimeters unless otherwise indicated.

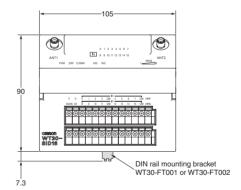
Serial Master Station

WT30-M01-FLK



I/O Slave Station

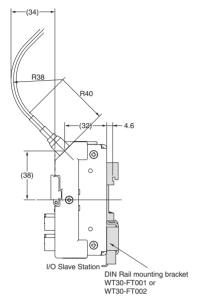
WT30-SID16 WT30-SMD16 WT30-SMD16-1



OMRON

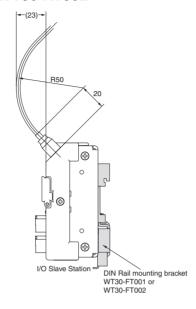
With Magnet-base Antenna

WT30-AT001



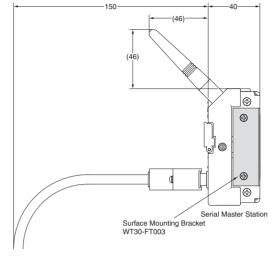
With Flat Diversity Antenna

WT30-AT002



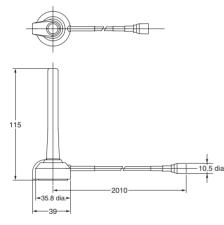
With Pencil Antenna

WT30-AT003



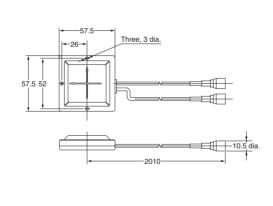
Magnet-base Antenna

WT30-AT001



Flat Diversity Antenna

WT30-AT002



Pencil Antenna

WT30-AT003



DIN Rail Mounting Bracket WT30-FT001

WT30-FT002



Surface Mounting Bracket WT30-FT003



Flat Diversity Antenna Mounting Brackets (with magnets)

WT30-FT011



Terms and Conditions of Sale

- Offer; Acceptance. These terms and conditions (these "Terms") are deemed part of all quotes, agreements, purchase orders, acknowledgments, price lists, catalogs, manuals, brochures and other documents, whether electronic or in writing, relating to the sale of products or services (collectively, the "<u>Products</u>") by Omron Electronics LLC and its subsidiary companies ("<u>Omron</u>"). Omron objects to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms
- Prices: Payment Terms. All prices stated are current, subject to change without notice by Omron. Omron reserves the right to increase or decrease prices on any unshipped portions of outstanding orders. Payments for Products are due net 30 days unless otherwise stated in the invoice.
- Discounts. Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be allowed only if (i) the invoice is paid according to Omron's payment terms
- and (ii) Buyer has no past due amounts.

 Interest. Omron, at its option, may charge Buyer 1-1/2% interest per month or the maximum legal rate, whichever is less, on any balance not paid within the stated terms
- Orders. Omron will accept no order less than \$200 net billing.
- Governmental Approvals. Buyer shall be responsible for, and shall bear all costs involved in, obtaining any government approvals required for the importation or sale of the Products.
- Taxes. All taxes, duties and other governmental charges (other than general real property and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Omron or required to be collected directly or indirectly by Omron for the manufacture, production, sale, delivery, importation, consumption or use of the Products sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and remitted by Buyer to Omron.
- Financial. If the financial position of Buyer at any time becomes unsatisfactory to Omron, Omron reserves the right to stop shipments or require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with these Terms or any related agreement, Omron may (without liability and in addition to other remedies) cancel any unshipped portion of Products sold hereunder and stop any Products in transit until Buyer pays all amounts, including amounts payable hereunder, whether or not then due, which are owing to it by Buyer. Buyer shall in any event remain liable for all
- Cancellation: Etc. Orders are not subject to rescheduling or cancellation unless Buyer indemnifies Omron against all related costs or expenses.
- 10. Force Majeure. Omron shall not be liable for any delay or failure in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.
- Shipping: Delivery. Unless otherwise expressly agreed in writing by Omron:
 Shipments shall be by a carrier selected by Omron; Omron will not drop ship except in "break down" situations.
 - b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall constitute delivery to Buyer; c. All sales and shipments of Products shall be FOB shipping point (unless oth-
 - erwise stated in writing by Omron), at which point title and risk of loss shall pass from Omron to Buyer; provided that Omron shall retain a security interest in the Products until the full purchase price is paid; d. Delivery and shipping dates are estimates only; and e. Omron will package Products as it deems proper for protection against nor-
- mal handling and extra charges apply to special conditions.

 12. Claims. Any claim by Buyer against Omron for shortage or damage to the Products occurring before delivery to the carrier must be presented in writing to Omron within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Products term Omron in the condition claims. from Omron in the condition claimed.
- Warranties. (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.

 (b) <u>Limitations</u>. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABIL-

- ITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. Omron further disclaims all warranties and responsibility of INI ENDED USE. Office further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) <u>Buyer Remedy</u>. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty repair indemnity or any other claims or expresse readding. ble for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty See http://oeweb.omron.com or contact your Omron representative for published information.
- lished information.

 Limitation on Liability: Etc. OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY. Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

 Indemnities. Buyer shall indemnify and hold harmless Omron Companies and their employees from and against all liabilities, losses, claims, costs and expenses (including attorneys fees and expenses) related to any claim inves-
- expenses (including attorney's fees and expenses) related to any claim, investigation, litigation or proceeding (whether or not Omron is a party) which arises or is alleged to arise from Buyer's acts or omissions under these Terms or in any way with respect to the Products. Without limiting the foregoing, Buyer (at its own expense) shall indemnify and hold harmless Omron and defend or settle any action brought against such Companies to the extent based on a claim that any Product made to Buyer specifications infringed intellectual property
- rights of another party.

 Property: Confidentiality. Any intellectual property in the Products is the exclusive property of Omron Companies and Buyer shall not attempt to duplicate it in any way without the written permission of Omron. Notwithstanding any charges to Buyer for engineering or tooling, all engineering and tooling shall remain the exclusive property of Omron. All information and materials supplied by Omron to Buyer relating to the Products are confidential and proprietary, and Buyer shall limit distribution thereof to its trusted employees and strictly
- prevent disclosure to any third party.

 <u>Export Controls.</u> Buyer shall comply with all applicable laws, regulations and licenses regarding (i) export of products or information; (iii) sale of products to "forbidden" or other proscribed persons; and (ii) disclosure to non-citizens of regulated technology or information.

 Miscellaneous. (a) Waiver. No failure or delay by Omron in exercising any right
- Miscellaneous. (a) Waiver. No failure or delay by Omron in exercising any right and no course of dealing between Buyer and Omron shall operate as a waiver of rights by Omron. (b) Assignment. Buyer may not assign its rights hereunder without Omron's written consent. (c) Law. These Terms are governed by the law of the jurisdiction of the home office of the Omron company from which Buyer is purchasing the Products (without regard to conflict of law principles). (d) Amendment. These Terms constitute the entire agreement between Buyer and Omron relating to the Products, and no provision may be changed or waived unless in writing signed by the parties. (e) Severability. If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision. (f) Setoff. Buyer shall have no right to set off any amounts against the amount owing in respect of this invoice. (a) Definitions. As used against the amount owing in respect of this invoice. (g) <u>Definitions</u>. As used herein, "including" means "including without limitation"; and "<u>Omron Companies</u>" (or similar words) mean Omron Corporation and any direct or indirect subsidiary or affiliate thereof.

Certain Precautions on Specifications and Use

- <u>Suitability of Use.</u> Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases but the following is a non-exhaustive list of applications for which particular attention must be given: Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this document.

 - (ii) Use in consumer products or any use in significant quantities.
 (iii) Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations. (iv) Systems, machines and equipment that could present a risk to life or property. Please know and observe all prohibitions of use applicable to this Prod-
 - NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO

- ADDRESS THE RISKS, AND THAT THE OMRON'S PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
- OVERALL EQUIPMENT OR SYSTEM.

 Programmable Products. Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

 Performance Data. Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.
- Change in Specifications. Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time
- to confirm actual specifications of purchased Product.

 <u>Errors and Omissions.</u> Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.



Complete "Terms and Conditions of Sale" for product purchase and use are on Omron's website at www.omron247.com – under the "About Us" tab, in the Legal Matters section.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

OMRON ELECTRONICS LLC

1 Commerce Drive Schaumburg, IL 60173 Tel: 847.843.7900

For U.S. technical support or other $\,$

inquiries: 800.556.6766

OMRON CANADA, INC.

885 Milner Avenue

Toronto, Ontario M1B 5V8 Tel: 416.286.6465 **MEXICO SALES OFFICES**

 Mexico, D.F.
 555.660.3144

 Ciudad Juárez
 656.623.7083

 Monterrey, N.L.
 818.377.4281

 Querétaro
 442.135.4510

BRAZIL SALES OFFICE

Sao Paulo 55.11.2101.6310

ARGENTINA SALES OFFICE

Cono Sur 54.114.787.1129

CHILE SALES OFFICE

Santiago 562.206.4592

OTHER LATIN AMERICAN SALES Florida 954.227.2121 **OMRON ON-LINE**

Global -

www.omron247.com

USA -

www.omron247.com

Canada www.omron.ca

Brazil -

www.omron.com.br

Latin America -

www.espanol.omron.com

Cat. No. N139-E1-01 3/07 Specifications subject to change without notice Printed in USA

AMEYA360 Components Supply Platform

Authorized Distribution Brand:

























Website:

Welcome to visit www.ameya360.com

Contact Us:

> Address:

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd Minhang District, Shanghai , China

> Sales:

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

Customer Service :

Email service@ameya360.com

Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com