

WRT SERIES

Wireless Data Transmitter/Receiver

NK Technologies offers an easy to install and configure wireless data communication solution for any RS485 network protocol. Each WRT radio can be configured as a master or slave and set at the factory to transmit **Modbus RTU** formatted packets. Network address and channel frequency switches are always visible for field selection to suit the specific application and environmental conditions. The system allows for wired and wireless equipment mixes to avoid radio obstacles. It is simple to configure for existing network packet parameters, provides LED indication of network status, and is completely transparent to present equipment. Wiring to the terminal block does not require any tools, simply insert the power supply and equipment network cable conductors into the well marked position.



Wireless Data Transmitter/Receiver Applications

Retrofit Wired to Wireless

- No need to change existing RS485 equipment.

Communication From Master to One or Multiple Slaves

- Transmit up to 800 meters line of sight.
- IEEE 802.15.4 (2.4 GHz) standard.

Automatic route detection

- Self-forming, self-healing networking.
- 100 nodes per network maximum through 15 channels.

Avoid cabling expense

- Reliably monitor process conditions without drilling holes, running conduits or network cables.

Note: Use NK Technologies ADC analog to digital converter for up to 8 sensing points, and transmit the data seamlessly via 2.4 GHz radio signals.

Wireless Data Transmitter/Receiver Features

Compact Housing - Unobtrusive Styling

- Pivoting antenna for cramped enclosure spaces.
- Compatible with most automation systems.

Easy Wiring

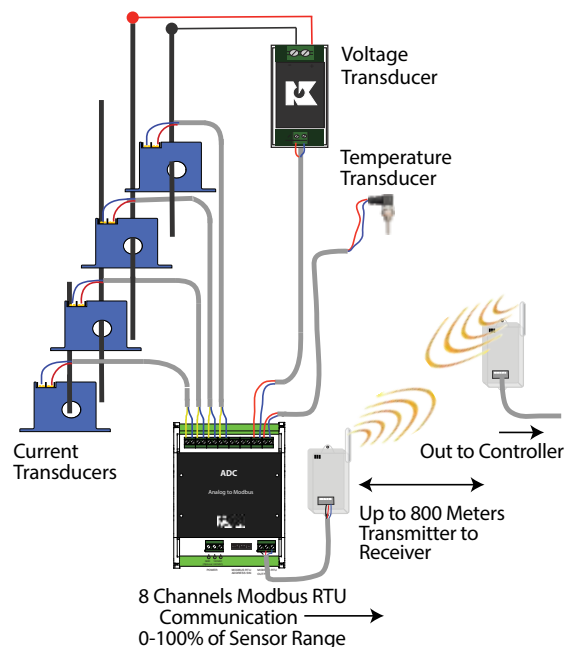
- Strip and insert, no screws to tighten.

Easily Adjustable Address and Channel Frequencies

- Speeds startup.

Plastic Case

- Install on a wall or in a non-metallic enclosure.



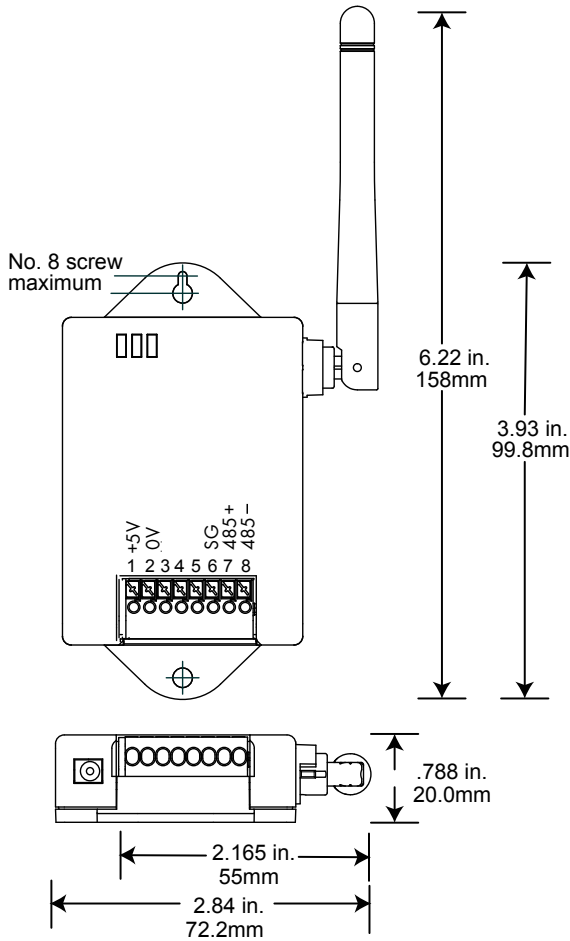
Accessories



Free program expedites evaluation process. See page 1 for details.



Wireless Data Transmitter/Receiver Dimensions

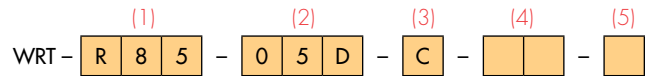


Wireless Data Transmitter/Receiver Specifications

Power Supply	5 VDC 100 mA
Output	Modbus RTU/ASII
Radio Specifications	4 GHz (IEEE 802.15.4)
Transmit Power	10 mW
Channel frequencies	15, field selectable
Network ID	00 to 99, field selectable
Group ID	16 field selectable
Baud Rate	2.4 to 115.2 kbps, factory set at 9.6 kbps
Case	UL94 V0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0-95% RH, non-condensing
Listings	UL 508 Industrial Control Equipment (USA & Canada)

Wireless Data Transmitter/Receiver Ordering Information

Sample Model Number: WRT-R85-05D-C-0-S
Radio transmitter/receiver Modbus RTU/ASII RS485 communication with 5 VDC power supply, common housing, 2 zones, and slave node.



(1) Input/Output	R85	Modbus RTU RS485 Input/Output
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(2) Power Supply	05D	5 VDC
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(3) Housing	C	Common
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(4) Zones	0	Slave node operation
	1	Single zone, master node operation
	2	2 zones, 63 inputs each (99 maximum)
	4	4 zones, 31 inputs each
	7	7 zones, 15 inputs each
	13	13 zones, 7 inputs each

(5) Node Type	M	Master node
	S	Slave node (Must be 0)

Sample Network: Multiple 485 Connections

