



"WIRELESS SYSTEMS AND COMMUNICATION SOLUTIONS"



SR5000-DH2

The WIO® DH2™, SR5000-DH2, is part of the WIO family of wireless products. The DH2 is an economical I/O extension to PLCs, EFMs and RTUs typically found in hazardous and remote industrial process conditions.

The DH2 design is an excellent solution for installations requiring peer-to-peer communications of various process conditions from multiple WIO Base Units and WIO Monitors. Depending on your application, the flexible I/O options include Modbus Master and Slave functionality with full Repeater capabilities.

The DH2 utilizes the license free 902-928 MHz ISM band with FHSS (Frequency Hopping Spread Spectrum) and FSK (Frequency Shifting Key) technology (optional 2.4 GHz DSSS (Direct Sequence Spread Spectrum) version also available), which provides highly reliable communication between remote devices and the primary control panel, EFMs or RTUs via RS232/485 data port.

The DH2 contains extensive self-checking software that continuously verifies the instrument's health. System implementation is a breeze with OleumTech's user-friendly configuration software. The DH2 eliminates costly cable and conduit runs on both new projects and retrofits, and replaces them with a low-maintenance, versatile and robust wireless solution.

Integrate OleumTech "Wireless Systems and Communication Solutions" into existing systems and enjoy the benefits of tomorrow's low cost, innovative wireless technology today.




FEATURES	APPLICATIONS	BENEFITS
<ul style="list-style-type: none"> • License Free (ISM) Band, FHSS, FSK Technology • Bi-Directional Radio Link • Range of up to 40 miles with Clear Line of Site • Low-power • Modbus RTU • Error Free High Speed Communication • Repeater Functionality • User Defined Registers or Factory Programmed • Easy Set-up 	<ul style="list-style-type: none"> • Oil and Gas • SCADA Systems • PLC/RTU Extensions • Water/Wastewater • Pump Control • Artificial Lift • Petro-Chem • Tank Level • Utilities • Irrigation Systems 	<ul style="list-style-type: none"> • Eliminate Costly Conduit and Wiring • Monitor your Process Condition 24/7 • Reduce Cost of Labor and Installation • Reduce Maintenance and Operational Costs • Meet Regulatory Requirements • Reliable and Dependable Operation

SYSTEM HARDWARE

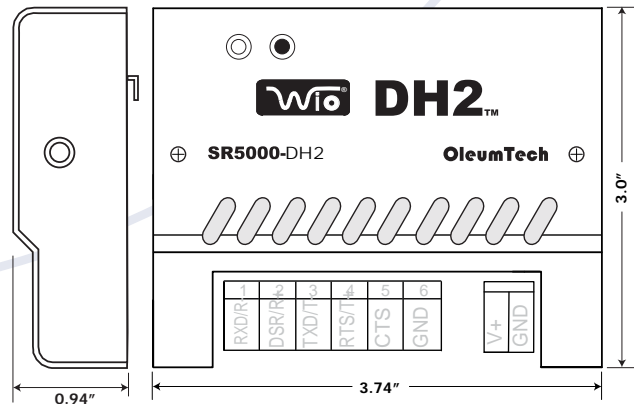
Embedded Controller 32-bit low power ARM7 microcontroller with internal FLASH (field upgradeable)
Serial Interfaces RTU/EFM Serial Interface, standard RS232 or RS485 (software selectable, with MODBUS Master or Slave function)
 RS232 Configuration Interface/Debug User's Interface (can be configured as MODBUS Slave Interface)

WIRELESS COMMUNICATIONS

Type (Standard) 900 MHz: ISM, FSK, FHSS (Frequency Hopping Spread Spectrum)
(Optional) 2.4 GHz: DSSS (Direct Sequence Spread Spectrum)
Frequency 902 - 928 MHz
Data Rate 115.2 Kbps/9600 bps
Output Power 1 mW - 1W
Receiving Sensitivity -100 dBm at 115.2 Kbps
Range Up to 40 miles based on terrain and clear line of sight
Compliance FCC Part 15
 Complies with Canada IC requirements of CISPR 22
 Class I Division 2 certification (Pending)

MECHANICAL SPECIFICATIONS

Enclosure 3.7" x 3" x 0.94" (W x H x D)
Mounting Hardware Class I, Division 2
 Din Rail or Direct Mount
 Custom NEMA 4X enclosure available



ELECTRICAL SPECIFICATIONS

Operating Voltage
Average Current (mA)

6-24 Vdc Tx Power	6 Vdc		12 Vdc		24 Vdc	
	Receive	Transmit	Receive	Transmit	Receive	Transmit
1 mW	183	200	104	116	63	70
10 mW	183	231	104	134	63	80
100 mW	183	340	104	200	63	115
500 mW	183	430	104	330	63	182
1000 mW	183	525	104	450	63	250

GENERAL SPECIFICATIONS

Operating Conditions Temperature: -40 to 85 °C
 Humidity: 0 to 99%, non-condensing

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