



PRODUCT HIGHLIGHTS

- Industrial Wireless Gateway Functionality
- Compact, Low-Profile Design with Low Power Consumption
- Serial Interfaces
 - RS232 or RS485 (Software Selectable, Modbus Master/Slave Function)
 - RS232 Configuration
- Peer-to-Peer Communication / Up to 40-Mile Wireless Range
- Full Repeater Capabilities
- License-Free 900 MHz/2.4 GHz Band, Secure Data Transmission
- Scalable Solution
- Easy-to-Install, Configure and Use
- Wirelessly Connects to Class I; Division 1 Transmitters
- User-Friendly BreeZ® Configuration Software



SR5000-DH2



APPLICATIONS

- Oil & Gas, Pipeline, Petro-Chem, Water/Wastewater, Utilities, Irrigation Systems, Mining, SCADA Systems, PLC/RTU Extensions, Pump Control, Tank Level, 3A Sanitary, Pharmaceuticals, Biotechnology, and Much More



WIRELESS SENSOR NETWORK

- Reliable, Robust Wireless Performance
- Eliminates Costly Conduits and Wiring
- Monitor / Control Process Conditions 24/7
- License-Free ISM Band, FSK & FHSS Technologies
- Reduces Labor, Installation and Maintenance Costs
- Helps Meet Regulatory Requirements
- Industrial Strength Performance & Durability

Wireless Gateway	902-928 MHz ISM License-Free Band	Peer-to-Peer Communication
Easy-to-Configure BreeZ® Software	RS232 / RS485 Serial Interface	Modbus Master / Slave Functions
Full Repeater Capabilities	Scalable Solution	Class I; Division 2

Technical Specifications






HARDWARE FEATURES

Device Functionality	· Wireless Gateway
Embedded Controller	· 32-bit Low Power ARM7 Microcontroller with Internal FLASH (Field Upgradeable)
Serial Interfaces	· RTU Port (RS232/RS485 Modbus Master or Slave) Terminal Block
Configuration	· Config/Debug Port - RS232 Slave Only (RJ-45)
Self-Diagnostics	· Contains Comprehensive Self-Checking Software and Hardware for Continuous Monitoring of Operation

WIRELESS COMMUNICATIONS

Type: 900 MHz	· ISM Band, FSK (Frequency-Shift Keying), FHSS (Frequency Hopping Spread Spectrum)
Frequency	· 902 to 928 MHz (North America); 915-928 MHz (Aus, Int'l)
Data Rate	· 9600 bps / 115.2 kbps
Output Power	· 1 mW to 1 W
Receiving Sensitivity	· -110 dBm @ 9600 bps or -100 dBm @ 115.2 kbps
Range	· Up to 40 Miles with Clear Line of Sight
Antenna Connector	· MMCX

CERTIFICATIONS

FCC	 · FCC Part 15
Industry Canada (IC)	· ICES-003
Safety	 · Class I; Division 2, Groups A, B, C, D T4; Ex nA IIC T4
	 · Class I Zone 2 AEx nA IIC T4
	  · ATEX: Sira 14ATEX4143X; Ex nA IIC T4 Gc · IECEx: SIR 13.0055X; Ex nA IIC T4 Gc

MECHANICAL SPECIFICATIONS

Dimensions	· 3.8" (W) x 3" (H) x 1.4" (D) / 96.5 mm (W) x 76.2 mm (H) x 35.6 mm (D)
Package Dimensions	· 8" (W) x 6" (H) x 2.5" (D) / 203 mm (W) x 152 mm (H) x 63 mm (D)
Weight	· Net: 0.75 lbs / 0.3 kg; Packaging: 1 lbs / 0.4 kg
Mounting Hardware	· DIN Rail or Direct Mount

ELECTRICAL SPECIFICATIONS

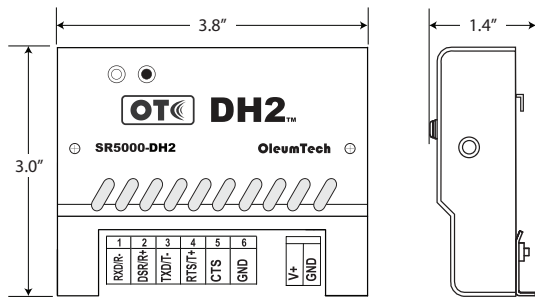
DC Power Input	· Starting from SN SM11266715: 30 VDC Max; 12 VDC Normal; 9 VDC Min · Prior to SN SM11266715: 24 VDC Max; 12 VDC Normal; 9 VDC Min
Average Power Input	· 2 Watt
Power Consumption	· Idle: 100 mA; Configuration: 110 mA; Transmission: 350 mA

GENERAL SPECIFICATIONS

Operating Conditions	· Temperature: Class I; Div 2: -40 °F to 176 °F (-40 °C to 80 °C)
	· ATEX/IECEx: -4 °F to 176 °F (-20 °C to 80 °C)
	· Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor
Country of Origin	· Made in USA

ORDERING INFORMATION

Model Number(s)	· 900 MHz: SR5000-DH2
Wirelessly Connects to:	· DH2, Base Unit, Wireless I/O Modules or Class I; Div 1 Transmitters



DH2 - WIRELESS GATEWAY



DH2 NETWORKING DIAGRAM

WIRELESS GATEWAYS



Wireless Range of Up to 40 Miles.
Peer-to-Peer



RS232
Config Port
Modbus Slave



RS232/RS485
Modbus Master/Slave

Wireless Range of Up to 7500 ft.
Point-to-Multipoint



TRANSMITTERS

PLC, RTU, EFM,
RF Modem,
or Other
Modbus Master/
Slave Devices

SCADA

OleumTech Corporation



SR5000-DH2

19762 Pauling
Foothill Ranch, CA 92610

Phone: 866.508.8586 (Toll-free) / 949.305.9009
Fax: 949.305.9010

Sales@OleumTech.com
www.OleumTech.com



PRODUCT HIGHLIGHTS

- Industrial Wireless Gateway Functionality
- Compact, Low-Profile Design with Low Power Consumption
- Serial Interfaces
 - RS232 or RS485 (Software Selectable, Modbus Master / Slave Function)
 - RS232 Configuration
- Peer-to-Peer Communication
- Up to 1.6 km (US) / 750 m (Int'l) with Clear Line of Sight
- Full Repeater Capabilities
- License-Free 2.4 GHz Band, Secure Data Transmission
- Scalable Solution
- Easy-to-Install, Configure and Use
- Wirelessly Connects to Class I; Division 1 Transmitters
- User-Friendly BreeZ® Configuration Software
- 9-30 VDC Power Input

2.4 GHz



SR5400-DH2
SR5410-DH2



APPLICATIONS

- Oil & Gas, Pipeline, Petro-Chem, Water/Wastewater, Utilities, Irrigation Systems, Mining, SCADA Systems, PLC/RTU Extensions, Pump Control, Tank Level, 3A Sanitary, Pharmaceuticals, Biotechnology, and Much More



WIRELESS SENSOR NETWORK

- Reliable, Robust Wireless Performance
- Eliminates Costly Conduits and Wiring
- Monitor / Control Process Conditions 24/7
- License-Free ISM Band, DSSS (Direct-Sequence Spread Spectrum)
- Reduces Labor, Installation and Maintenance Costs
- Helps Meet Regulatory Requirements
- Industrial Strength Performance & Durability

Wireless Gateway

2.4 GHz ISM
License-Free Band

Peer-to-Peer
Communication

Easy-to-Configure
BreeZ® Software

RS232 / RS485
Serial Interface

Modbus Master /
Slave Functions

Full Repeater
Capabilities

Scalable
Solution

Class I; Division 2

Technical Specifications





HARDWARE FEATURES

Device Functionality	· Wireless Gateway
Embedded Controller	· 32-bit Low Power ARM7 Microcontroller with Internal FLASH (Field Upgradeable)
Serial Interfaces	· RTU Port (RS232 / RS485 Modbus Master or Slave) Terminal Block
Configuration	· Config/Debug or Modbus Slave (RS232), RJ-45
Self-Diagnostics	· Contains Comprehensive Self-Checking Software and Hardware for Continuous Monitoring of Operation

WIRELESS COMMUNICATIONS

Type: 2.4 GHz	· ISM Band, DSSS (Direct-Sequence Spread Spectrum)
Frequency	· 2.4 GHz: US and Int'l (International)
Data Rate	· 250 Kbps
Output Power	· US: 10 to 18 dBm (In 2 dBm Increment) / Int'l: -3dBm, 2dBm, 8 dBm, 10 dBm
Receiving Sensitivity	· -100 dBm @ 250 Kbps
Range	· Up to 1.6 km (US) / 750 m (Int'l) with Clear Line of Sight
Antenna Connector	· MMCX

CERTIFICATIONS

FCC		· FCC Part 15
Industry Canada (IC)		· ICES-003
Safety		· Class I; Division 2, Groups A, B, C, D T4; Ex nA IIC T4
		· Class I Zone 2 AEx nA IIC T4
		· ATEX: Sira 14ATEX4143X; Ex nA IIC T4 Gc
		· IECEx: SIR 13.0055X; Ex nA IIC T4 Gc

MECHANICAL SPECIFICATIONS

Dimensions	· 96.5 mm (W) x 76.2 mm (H) x 35.6 mm (D) / 3.8" (W) x 3" (H) x 1.4" (D)
Package Dimensions	· 203 mm (W) x 152 mm (H) x 63 mm (D) / 8" (W) x 6" (H) x 2.5" (D)
Weight	· Net: 0.3 kg / 0.75 lbs; Packaging: 0.4 kg / 1 lbs
Mounting Hardware	· DIN Rail or Direct Mount

ELECTRICAL SPECIFICATIONS

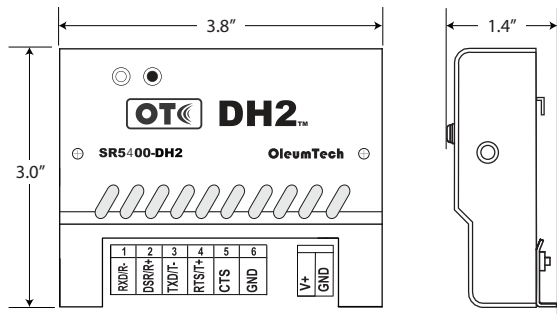
DC Power Input	· Starting from SN SM11266715: 30 VDC Max; 12 VDC Normal; 9 VDC Min · Prior to SN SM11266715: 24 VDC Max; 12 VDC Normal; 9 VDC Min
Average Power Input	· 2 Watt
Power Consumption	· Idle: 100 mA; Configuration: 110 mA; Transmission: 350 mA

GENERAL SPECIFICATIONS

Operating Conditions	· Temperature: Class I; Div 2: -40 °C to 80 °C (-40 °F to 176 °F)
	· ATEX/IECEx: -20 °C to 80 °C (-4 °F to 176 °F)
	· Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor
Country of Origin	· Made in USA

ORDERING INFORMATION

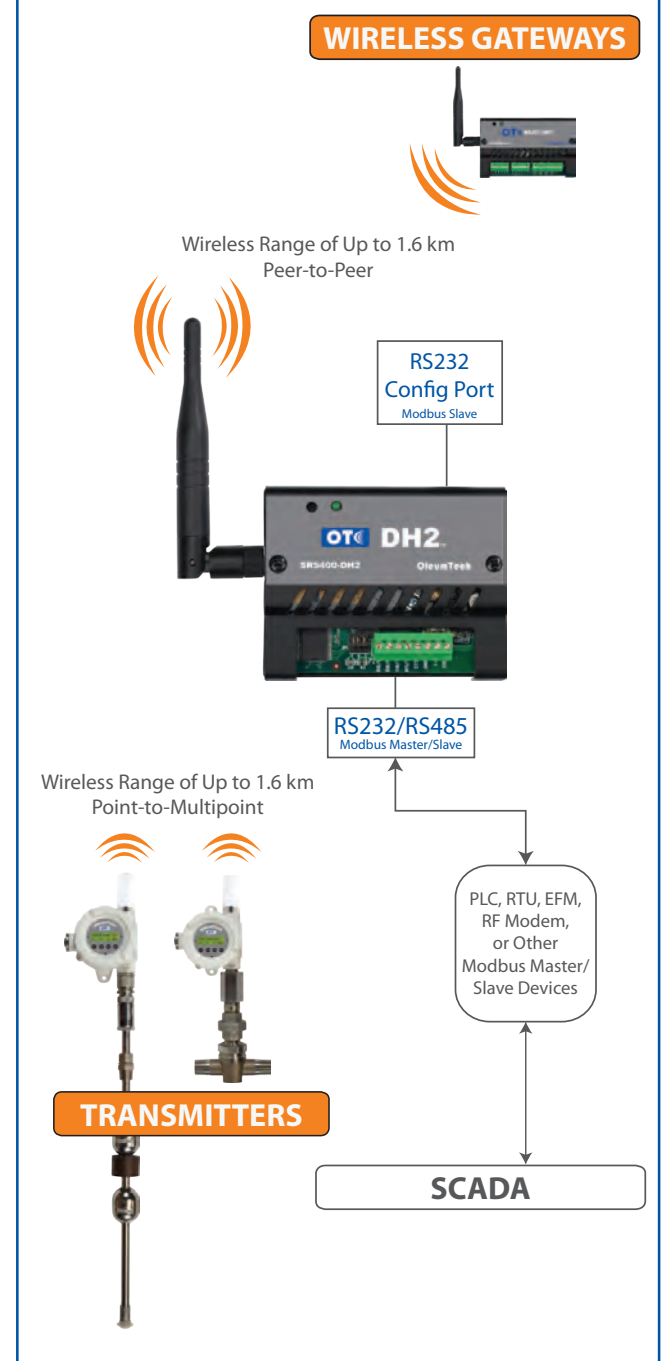
Model Number(s)	· US: SR5400-DH2 / Int'l: SR5410-DH2
Wirelessly Connects to:	· DH2, Base Unit, Wireless I/O Modules or Class I; Div 1 Transmitters



DH2 - WIRELESS GATEWAY



DH2 NETWORKING DIAGRAM



OleumTech Corporation



SR5400-DH2
SR5410-DH2

19762 Pauling
Foothill Ranch, CA 92610

Phone: 866.508.8586 (Toll-free) / 949.305.9009
Fax: 949.305.9010

Sales@OleumTech.com
www.OleumTech.com