Smart Data Series Transceiver /TRM Digital Data Module

WDS1510(MDS EL7051)	**130-174MHz**	**TRM/TRS/TRA400**	**410-470MHz**
WDS2510(MDS EL7052)	**220-240MHz**	**TRM/TRS/TRA230**	**220-240MHz**
WDS4510(MDS EL7054)	**330-512MHz**		
WDS9510(MDS EL7054)	**800-960MHz**		

TRM 22Watts
(SPI、3.3V、MMCX)
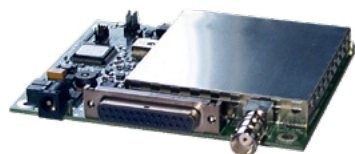
EL705 2Watts
(232/485、9-30V、TNC)

FEATURES

- DATA series quality and performance in a value priced data transceiver
- Worldwide product
- FCC and IC 400 MHz
- ETSI 400 MHz(4800 bps)
- SRRC IDH99FJ0 138 200MHz China
- Small size for internal integration as OEM product
- 9600bps throughput and
- Low current consumption and sleep modes for solar powered applications
- Flash memory software storage for futuer upgrades
- Keys on data
- Keyline output for keying external devices on receive
- Noise-free squelch
- CD for CSMA applications
- Easy integration into any OEM equipment
- Configures via HHT,WDS Configuration Software or OEM processor

WDS...Global wireless solutions. Industrial Wireless Performance.

For over 10 years, Wireless Data Systems(WDS) has been providing wireless networking solutions with applications in SCADA, telemetry, telecommunications, and online transaction markets.WDS provides licensed and unlicensed solutions, with more than 50000 radios installed in over 10countries.

DATA Series Product Over view

The DATA series product is complete family of value priced radios for private point-multipoint SCADA and other telemetry applications.They operate at the 130-174MHz,220-222MHz,330-512MHz frequency bands.The DATA series are available as board level product or as a packaged unit.The board level product allows Lottery Terminal.The packaged unit comes in a small case that is ready to plug in power,an antenna and your terminal device.

The DATA Series transceivers are designed to help you reduce overall communica-tions cost by providing low power consumption,small size and an inexpensive RF connector.

All DATA series models are available for private labeling.

DATA Series Board Level Units

The DATA sreies board level unit is a single board measuring approximately 3.5 x 4.75 inches(8.90 x 12.07cm).It comes complete with RF connector and RS-232/485 or TTL interface via a header connector or an edge mounted DB-25.An optional piggyback board is available for RS-485/422 applications.

The board level ubit is fully type accepted and includes its own RF shuelding.It may be inserted into your device as simply an internal radio, or it can be tightly integrated within the product. By using the processor in your RTU to access radio parameters you bilities. LEDs provide rapid assessment of operating status.

The available configurations are follows:

- OEM board TTL,8 Vdc input
- OEM board RS-232,10-30 Vdc input
- OEM board TTL and pinggybacked RS-485,10-30 Vdc input

Digital Modems:

- 9600bps in 12.5kHz channel
- 19.2kbps in 25kHz channel

Analog Modes:

- Bell 202
- External Modem(4 wire audio) with VOX, switchable Pre-and De-emphasis

DATA Series Packaged Units

DATA Series Packaged Units are the board level unit in a small extruded case,and are available in either RS-232 or RS-485 user interface and a 10-30Vdc input voltage.

2Watts Transceiver Board

Enclosed 2/7/25watts

Special for civil air defense alarm system

WDS
Wireless Data Systems

Smart Data Series Transceiver/TRM Digital Data Module Specifications

Operating frequency

WDS1510/MDS EL7051   130-174 MHz

WDS2510/MDS EL7052   220-240 MHz

WDS4510/MDS EL7054   330-512 MHz

WDS9510/MDS EL7059   800-960 MHz

TRM/TRS/TRA400   410-470 MHz

TRM/TRS/TRA230   220-240 MHz

Radio Type

Synthesized, Simplex or Half Duplex, Channel bandwidth occupied 12.5 KHz , Split Freq or Simplex

Primary Power

Voltage：   10-30VDC (2W), 3.3V (TRM)
                10-16VDC (25W), 3.3-45V (TRS)

RX Supple Current：   75mA@13.8VDC

TX Supple Current: 480mA@13.8VDC, 2W

Circuit Protection：15A self recovery fuse, built-in polarity reverse protection, power input protection

Data Interface

Interface：   RS-232/485 Through DB-25 Connector

Interface Port Baud Rates：1.2-19.2kbps

Over-the-Air Data Rate：9.6kbps (Data series)
                4.8/9.6/19.2kbps (TRX series)

Data Delay： <15ms

Transmission

Frequency Range：130-174MHz, 220-240MHz,
                330- 512MHz, 800-960MHz (Data series),
                410-470MHz, 2 20-240MHz (TRX series)

Stepped Frequency： 5/6.25KHz

Modulation Mode：4FSK (Data series)/ GMSK (TRX series)

Carrier Power：   100mW, 1W, 2W/5W, 15W, 25W

Duty Cycle：50% (100% additional radiator)

Frequency Stability：1.5ppm,-40℃ to +70℃

Adjacent Channel Radiation：-65dB

Timeout Timer：1-255s

Transmitter Keying：On data

Start Time：<7ms

Reception

Frequency Range：130-174MHz, 220-240MHz,
                330-512MHz, 800-960MHz (Data series),
                410-470MHz, 220-240MHz (TRX series)

Type：Double Conversion Superheterodyne

Frequency Stability：1.5ppm,-40℃ to +70℃

Radiation and Image Suppression：-70dB

Sensitivity：12dB Sinad@ -116dBm(19.2kbps),
            12dB Sinad@-119dBm（4.8kbps）

Data Performance：1x100-6 @ -108 dBm

Intermodulation Rejection：-70 dB Minimum

Adjacent Channel Selectivity：60dB

Environmental:

Temperature Range：-40℃ to +70℃

Humidity Range：95% @ 40 ℃ non condensing

Weight

Integrated board：135g (2W), 38g (TRS), 34g (TRM)

Enclosed：821g (blue), 1000g (black)

Size

Board Size：11.4x9.7x1.9cm (2W), 7.0x1.3x4.8cm (TRM),
            8.3x1.3x4.8cm (TRS)

Enclosed Size：16.9x3.4x11cm (blue), 18.4x14.3x5cm (black)
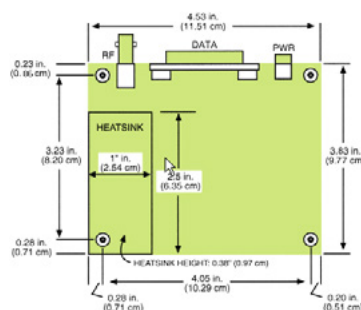
Enclosed Type：Aluminum

Parts

Built in power amplifier module (maximum 25W)

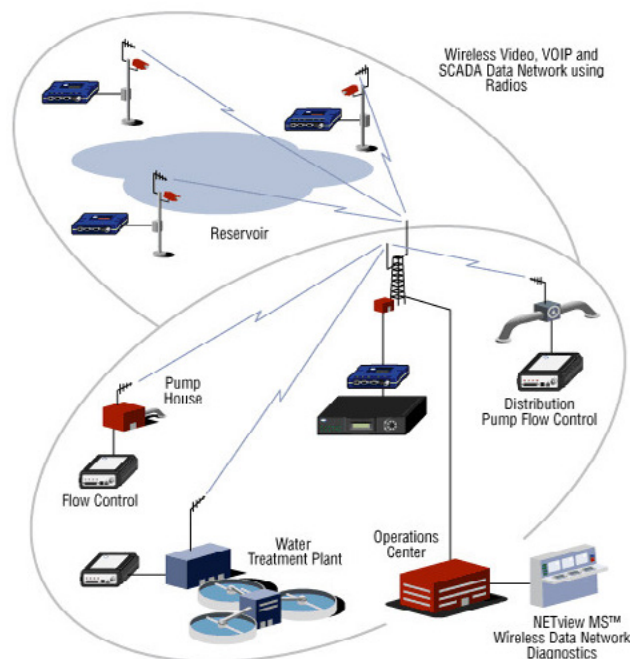PTT (Push-to-Talk)

Multichannel board (16CH)

Ethernet (IP) upgrade interface board

Mounting dimensions of integrated board (data series)

Radio access type approval code of Radio Administration Bureau of Ministry of industry and information technology of China:2012FP6383

Wireless Water/Wastewater Network

Shenzhen Sinosun Technology Co.,Ltd.

Address: Room 3A17, South Cangsong Building, Tairan Science Park,Futian District, Shenzhen City, Guangdong Province, P. R. China.
Postcode: 518040   Phone: +86 755 83849417 83435240   Fax: +86 755 83849434   E-mail: 13823678436@139.com   WWW.SINOSUN.CN
Johnson: +86 13902912908(Moblie&WeChat)   +852 44017395(Moblie&WhatsApp)   Tony: +86 13823678436(Moblie&WeChat)
Beijing: +86 13811936491   Shanghai:+86 13564038257   Chengdu: +86 13540153264   Xi'an: +86 13991217256