

wireless **WLDU** 

Group Four Transducer frees you from the web of wires by introducing wireless digitizer card WLDU. It allows to transmit amplified load signals to from LDU transmitter to LDU receiver wirelessly.



### **FEATURES**

- Wireless LDU Transmitter
- Wireless LDU receiver
- Transmission range 500 meters
- Network or point to point wireless interfacing
- Graphic presentation, analysis and set up PC program, DOP4 software

### **APPLICATIONS**

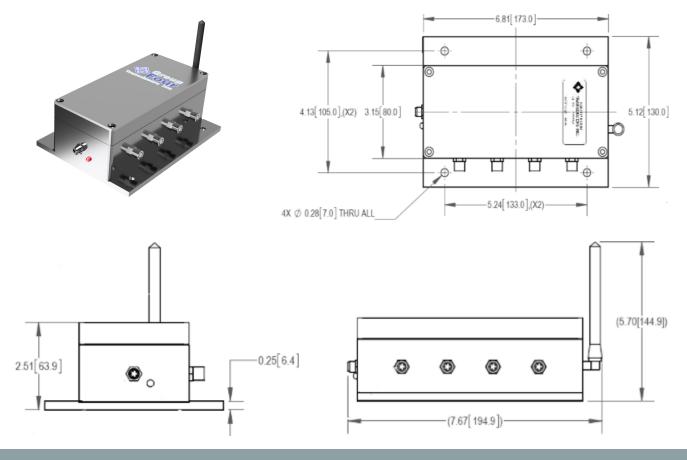
- Analog load cell systems
- Calibration equipment
- Test machines

### **OPTIONS**

- Transmission range 1km
- Transmission range 2km

## **OUTLINE DIMENSIONS**

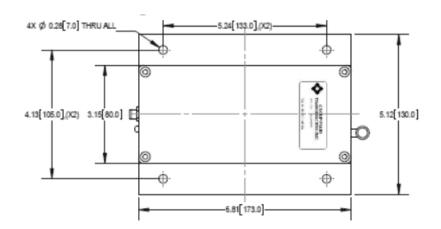
Wireless Transmitter

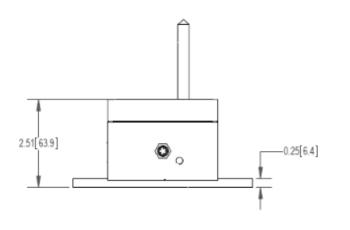


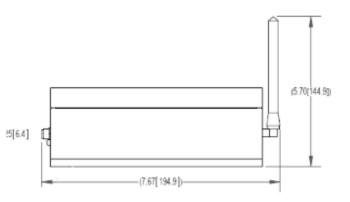
# **OUTLINE DIMENSIONS**









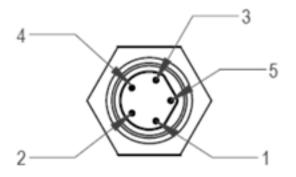


## **SPECIFICATIONS**

Model	WLDU	
INPUT AND A/D		
Linearity	<0.002% of full scale	
Load cell excitation voltage	5 VDC polarity shifting at 172HZ	
Load cell drive capability	RLC 250-2000 ohm	
Load cell wiring system	6 wires inclusive sense	
Load cell input range	±3.2 mV/V equivalent to ±16 mVdc	
Load cell input resolution	<20nV/increment	
A/D performance	172 updates/second;1000000 incr resolution	
Analog LP fliter performance	3 Hz; 20 db/decade	
Digital LP fliter performance	3-0.2 Hz; 40db/decade, selectable in 6 steps	
Averaging period (display output)	5 updates/second, variable rolling averaging	
GENERAL I/O's		
Hardware interface	RS485, 32 nodes or RS422 full duplex	
Data transmission rates	9.6; 19.2, 38.4; 57.6; 115.2 kb	
Data transmission protocol	Get results or auto transmit	
Output data rate	21-172 updates/second	
Logic inputs	-	
Logic outputs	_	
Power supply	12-24vdc max 100mA (12-14 Vdc if R LC<200ohm)	
INFLUENCES		
Temperature effect on zero	Typical 1ppm/°K, Max 2ppm/ °K	
Temperature effect on span	Typical 1ppm/°K, Max 2ppm/ °K	
Temperature range operating	-10°C/ +40°C; Storage -20°C/+60°C	
Long term stability of zero	Typical 5ppm/year at room temperature	
Relative humidity	0-95% non condensing	
EMI	10 V/m (1-2000 MHz)	
General I/O protection, all pins	Reversed polarity, excess voltage and surge	
Vibration	2.5G operational; 5G non-operational	
Protection, environment	IP40	
DIMENSIONS		
Height/length/width	H6mm excl. pins; L81.3mm; W 30.5mm	
Weight	27g (1oz)	
I/O pins	2x5 pins, 2.54mm pitch; 1x10 pins, 2.54mm pitch	
STANDARDS		
CE EMC directive	89/336 EN 61326/A1 Table A.1 passed	
Certificate of approval	Cert. no. DK0199-R76-03.01 (EN45.501)	
Certified accuracy	Class III: 10000e; 0,1 uV/VSI	
WIRELESS SPECIFICATIONS		
Transmission Distance	500 meters (ideal test connection)	
Carrier Frequencies	433, 315, 868 & 915 MHz	

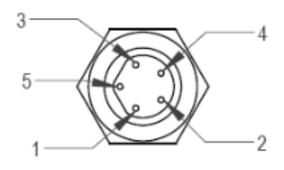
### **PIN CONFIGURATION**

Wireless LDU Transmitter M8 5pin male connector



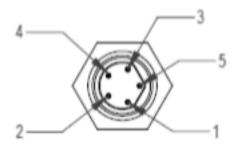
PIN NO	RS485
1	GND
2	DATA+(A)
3	N/C
4	DATA-(B)
5	PWR+

M8 5pin female connector



PIN NO	CONNECTION
1	EX+
2	SI+
3	SI-
4	EX-
5	SHEILD

Wireless LDU Receiver M8 5pin male connector



PIN NO	RS-485
1	GND
2	DATA+(A)
3	N/C
4	DATA- (B)
5	PWR+

### Wireless LDU Receiver

Option	Description	G4 Part Number
GEN	without RS-422 to usb converter	MNB Wireless REC
А	with RS-422 to usb converter	MNB Wireless REC RS422

Solutions

Notes

Wireless LDU transmitter

1. LDU calibrated in mV/V only

2. RF module needs to be configured to pair with receiver module

Measured

3. Group Four part number MNB wireless transmitter 4. 6ft M8 5 pin female to open end home run cable provided Notes

Wireless LDU receiver

1. 6ft M8 5pin female to open end homerun cable provided

2. Receiver box need to be configured to pari with transmitter box

3. Use Part number XS890 as the RS485/422 to usb converter



#### Group Four Transducers

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