

# teleWire

Alron "Load-cell Cable Substitute" solution allows you to use Load cell wirelessly.

## Our Solution;

The load cell ensures that you can make accurate measurements in long, moving or difficult physical conditions (high current - voltage - magnetic field - noise - temperature), allowing you to "bypass" the problem area.

## WI-FI TRANSMITTER UNIT

Measurement Features	
Loadcell connection	4 wire
Minimum loadcell resistance	80 $\Omega$
Loadcell sensitivity (mV/V)	2 - 4
ADC precision	24 bit
Measuring period battery (ext. power supply)	1-2-5-10 (5-10-20-40)
Ömrü (3.6V, Litium, D Size)	
1 measurement/sec, 380 $\Omega$ , 8 (24) hours/day	> 54 (40) months
1 measurement/sec, 80 $\Omega$ , 8 (24) hours/day	> 34 (21) months
Communication Type	
Standard	Standard
Frequency	2.4-2.5 GHz
Distance	250 meters
Operation Range	
Temperature range	-40 °C / +85 °C
Protection class	IP67
Box dimensions (mm)	
	158x90x60 (158x130x60 Fixed ant.)
Warranty period	
	2 years

The sending unit can be powered by battery or external DC supply. It goes to sleep mode in long standby, and wakes up with the smallest weight change and returns to standard mode.

Depending on the application environment, the antenna can be selected either with an extension cable inside the box or out of the box.

Load cell sensitivity, measurement period, device number and communication frequency are adjusted with the dip-switch in the box.



# WI-FI RECEIVER UNIT

By processing the 24-bit precision weight information received from the transmitters, high resolution (20-bit) Analog output signal and relay output information are generated (according to the receiver option).

Analog output signal; The load cell can be set to emulation mode (20/80 mV) or standard analogue output mode (2.5V/10 V).

Load cell is in emulation mode; You can continue to work without changing your existing system, simply by converting your load cell cable to wireless. (You must recalibrate your indicator)

In standard analog output mode; the receiving unit can be directly connected to automation products such as PLC.

Each receiving unit can show the loads of each of them separately, by communicating with 6 different transmitter units. You can choose which transmitter will have the information on the analog output with digital inputs. Tare function can also be used for selected data. With the RS-485 port, the weight information of the transmitters is transferred to the External display.

20-bit load information; as raw and calibrated weight data, via RS-485 ModBus RTU connection, HMI, PLC, SCADA, ERP-MIS-SAP etc. systems, providing you with design and usage flexibility.

Analog/Load cell emulation output		Power supply	10 - 30 Vdc
Connection	4 wire	Communication	2.4 Ghz, 16ch, 250mt
DAC resolution	20 bit	Temperature range	-40 °C / +85 °C
Excitation voltage input range	2,5 - 12,5 V	Protection class	IP-54
Voltage output range	±20mV, ±80mV, ±2.500V, ±10.000V	Box dimensions (mm)	103x34x100 (without ant.) 103x41x100 (Option D)
Relay output	1 (2) (option)	Warranty period	2 years
Digital input	3 (4) (option)	Analogue output voltage range, communication channel and number of transmitting devices are set by the user with Dip-switch.	
OLED display	256x64 dots		
Serial port	RS-485 ModBus RTU		

## WLCR

- \* ModBus RTU
- + Data transfer

## WLCR D

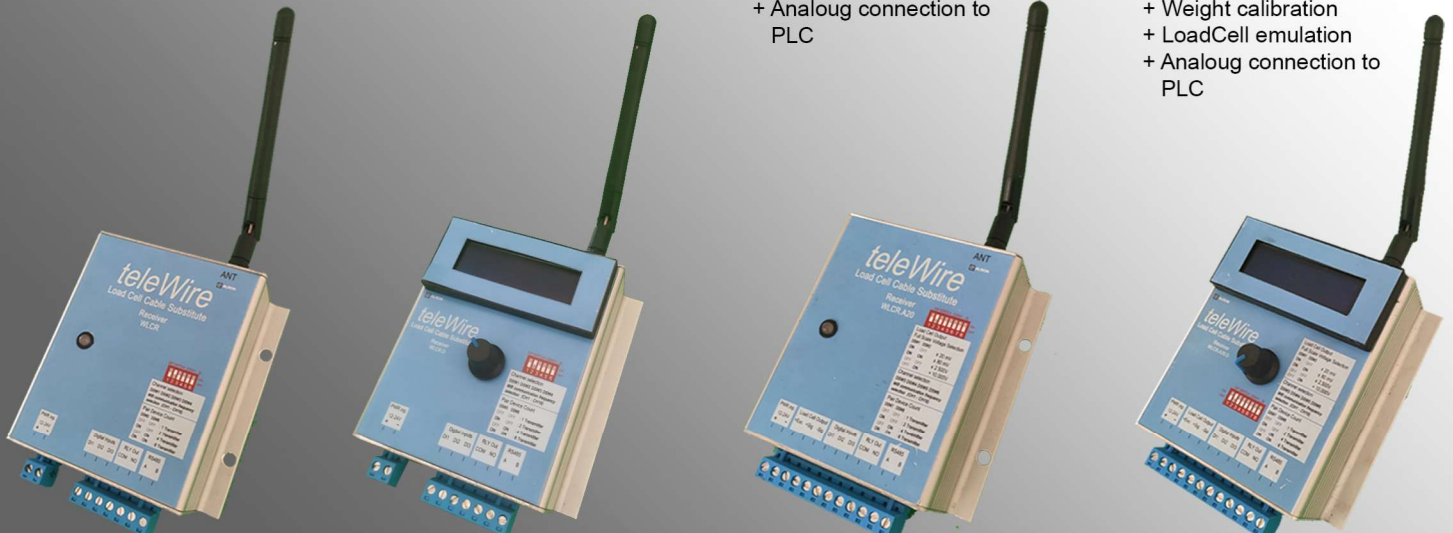
- \* OLED Display
- \* ModBus RTU
- + Weight calibration

## WLCR A20

- \* 20-bit DAC
- \* ModBus RTU
- + LoadCell emulation
- + Analogue connection to PLC

## WLCR A20 D

- \* OLED Display
- \* 20-bit DAC
- \* ModBus RTU
- + Weight calibration
- + LoadCell emulation
- + Analogue connection to PLC



# Weight Indicator



# Loadcell



# Weight Indicator



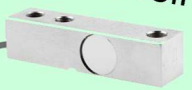
mV



250 mt. standart  
1 km optional



# Loadcell



# #1



# #6



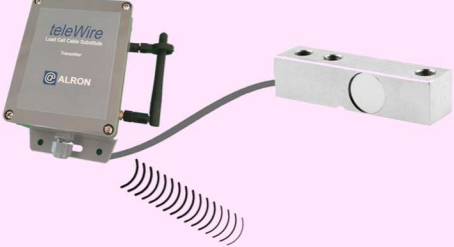
# PLC



3xDO

0-10V

# #1



# #6



# HMI



RS485  
MODBUS



RS485  
MODBUS

# Ext. Display

