



WLC range Wireless force and torque sensors



Unique Bluetooth wireless sensor technology



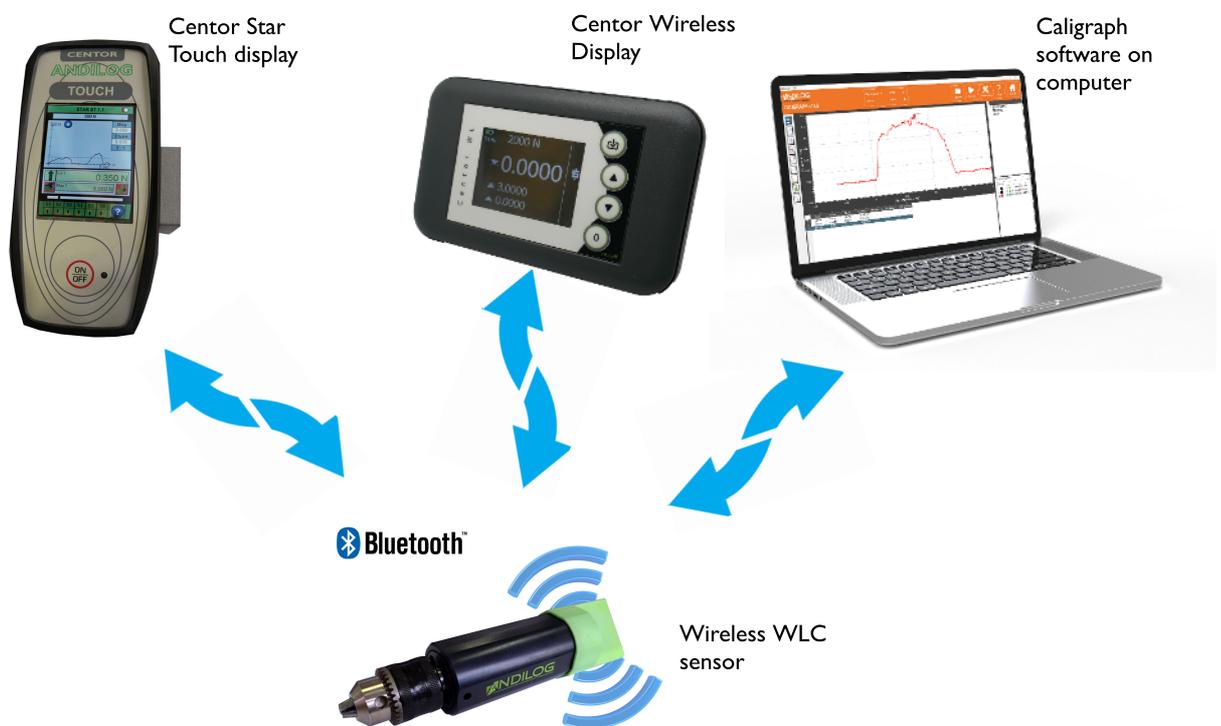
With decades of experience, Andilog has developed its own wireless force and torque sensor technology. Based on Bluetooth technology, these sensors make it possible to perform force measurements by removing the cables that connect them to a display or a computer. This allows you to install a sensor in an enclosed area and avoids any interference from the cable during your moving measurements.

This Bluetooth wireless technology can be adapted to all our force and torque sensors with strain gauges and allows efficient and highly accurate measurements. It also offers a wide choice of results display options: Centor Touch display, computer or smartphone.

Displays and compatibility

There are two ways to use the WLC wireless sensors:

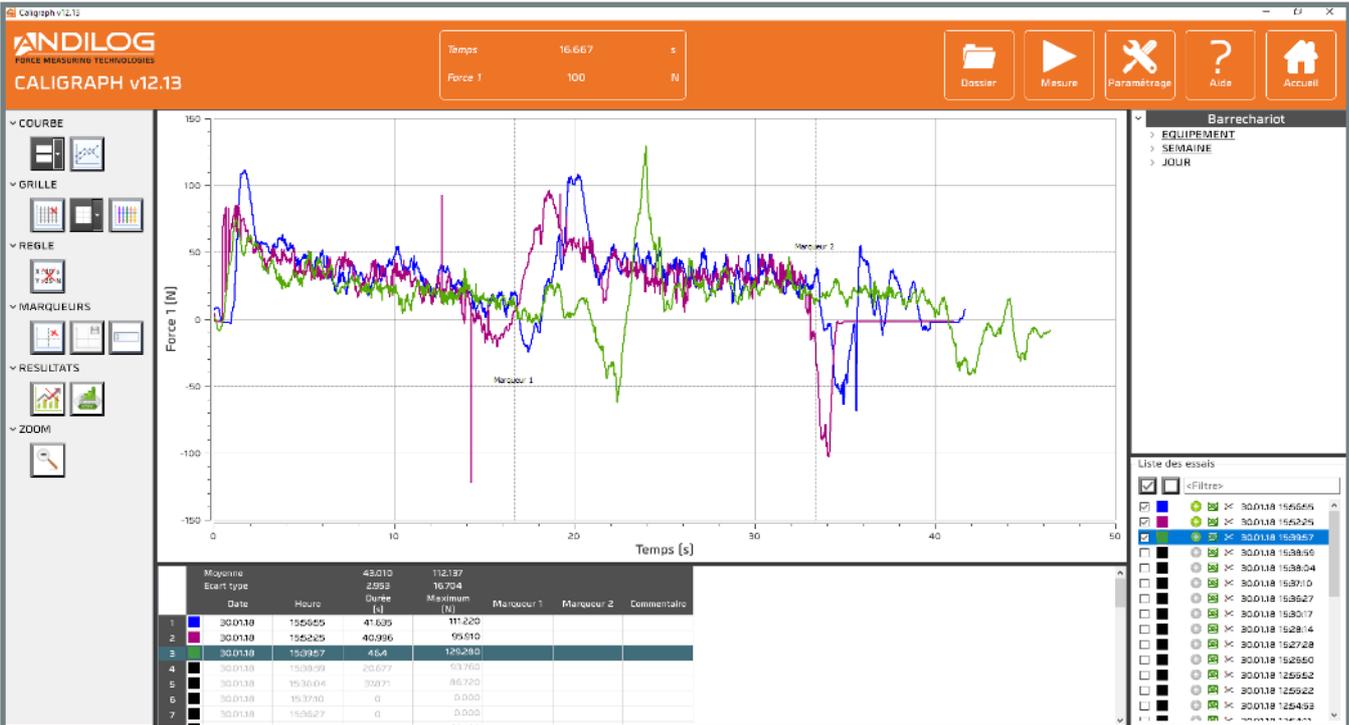
- **Centor Star Touch Display:** Portable solution dedicated to measurement that displays the curve and results: maximum, minimum, break.... Measurements and curves can be saved on an optional USB stick. It can also be equipped with an internal sensor up to 1,000 N (225 lbs) for use as a force gauge. option.
- **PC Caligraph software:** Connect your WLC sensor via Bluetooth directly to your computer and, thanks to the Caligraph software, plot the curves of your measurements.
- **Centor Wireless Display:** Simple solution to measure the maximum force on the WLC range of force and torque sensors.



Display solutions

| FONCTIONS | Centor Wireless | Centor Star Touch | Centor Star Touch + Datastick II | Computer with Caligraph software |
|---|--|---|---|---|
| Your need | Display of maximum and/or value in real time of the sensor | Instant display of the result of a measurement (maximum, break...) made with a wireless sensor without saving. Visualization of the measurement curve | Same as Centor Star Touch + save and transfer curves and results to USB stick for later use on computer | Acquisition of high resolution curves in real time and advanced calculations. |
| Bluetooth WLC sensor compatible | Yes | Yes | Yes | Yes |
| Memory of the connected sensors | 5 | 5 | 5 | No limit |
| Displays the curve | No | Yes | Yes | Yes |
| Displays the max and min | Yes | Yes | Yes | Yes |
| Sensor range | 20 meters / 65 feet | 20 meters / 65 feet | 20 meters / 65 feet | 20 meters / 65 feet |
| Saving the curve | | | Yes, 1,000 points per curve | Up to 1,000 points per second |
| Backup to USB key from the device | | | Yes | |
| Export to Excel | | | Yes | Yes |
| Overlaying curves | | | Yes | Yes |
| Analysis of curves and results | | | Yes | Yes |
| Word report creation | | | Yes | Yes |
| PDF report creation | | | Yes | Yes |
| Calculation of the breakpoint | | | Yes | Yes |
| Calculation of the force at a time | | | Yes | Yes |
| Automatic saving of results | | | Yes | Yes |
| Windows touch tablet compatible | | | Yes | Yes |
| Photo of the samples in the report | | | Yes | Yes |
| Average and standard deviation of the selected curves | | | Yes | Yes |

Caligraph - Real-time computer measurement

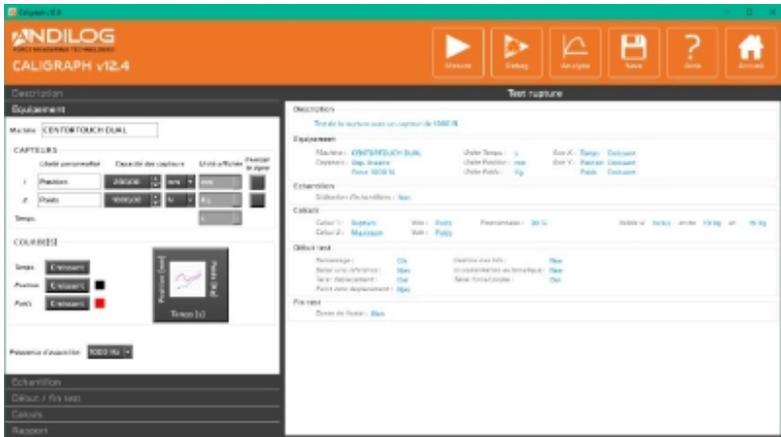


The WLC wireless sensors can be connected to a computer via Bluetooth Coupled with Caligraph acquisition and analysis software, you can monitor the evolution of your force and torque curves in real time, record your data, automatically calculate your results and edit customizable test reports.

The measurement starts with a single click and you can follow the torque and force measurements live at an acquisition rate of up to 1,000 Hz. In addition, Caligraph has predefined calculations to calculate, for example, the maximum torque, the average between two values or to detect a break.

Caligraph includes a report editor that allows you to easily present your curves and results in Microsoft Word or PDF files. Export functions also allow you to export your measurements or curves to Microsoft Excel for different analyses or integration into other computer systems.

Caligraph is the essential complementary tool to operate on a computer the tests performed with Andilog's range of force and torque measuring instruments.



Display Centor Star Touch



Equipped with a Bluetooth module, the Centor Star Touch is the portable field solution for measurements with your WLC wireless sensors.

This screen has a graphic display, an internal memory and automatically measures the maximum. But these are only the basic characteristics. The Centor Star Touch is also designed to directly display the most requested types of results in force measurement: break, average, force/time curve plot, statistical calculations, real-time good/no good sorting according to the manufacturing tolerance interval, data sending and communications to a USB computer.

Designed for the industrial environment, it provides high performance but also great ease of use thanks to its large colour touch screen. The icons guide the user to the configuration best suited to his tests. Settings, messages and results are available in several languages.

All features, flexibility and compactness make it a practical solution for production or field measurements in all conditions with our WLC wireless sensors.

OPTION - Dastack II - Portable solution for recording your curves

Thanks to the new DATASTICK II you can now count on a real mobile solution to easily save all your tests performed on the Centor Star Touch.

The Dastack II software and its USB key allow you to save automatically or on demand the results (calculations, statistics) and curves of your tests on a USB key.



Thanks to its integrated software, you can view your curves and measurement data on your computer and take advantage of the included software functions. This offers the possibility to replay your tests on your computer, with the import of saved data, the opportunity to compare the tests, and to finalize your measurements via the edition of reports in PDF or Word format. The export can also be done under an Excel spreadsheet.

Easy to use, the Dastack II plugs into the connector of your device using an adapter provided and the configuration is done via the interface of your torque meter.

The Dastack II is a complete solution for field testing and in accordance with the demanding requirements for traceability of results.

Centor Wireless Display



Thanks to Centor Wireless you can now use your force and torque sensors in Bluetooth. Compatible with the whole range of WLC sensors, the Centor Wireless is a simple wireless display for everyday measurement.

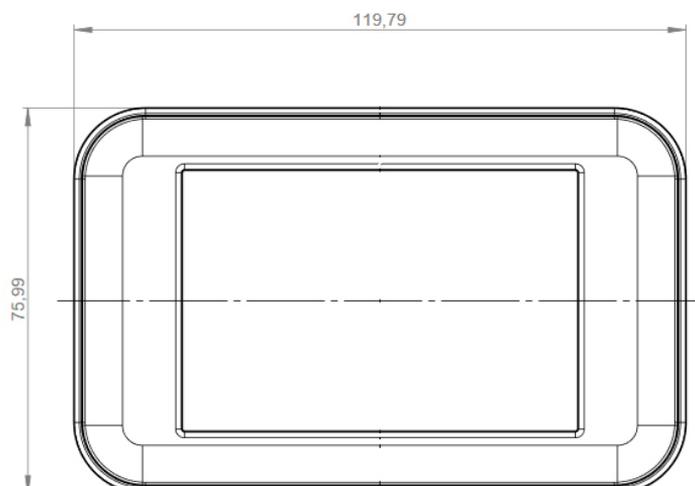
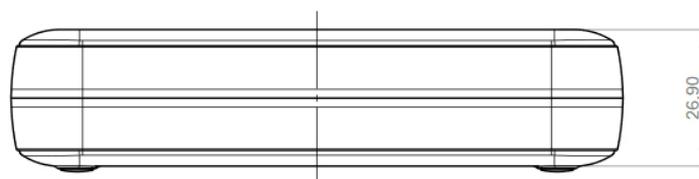
The Centor Wireless has the essential functions for fast and accurate measurements:

- Real-time force and torque display
- Display of the maximum in both measuring directions
- Rechargeable battery
- Bargraph

Designed for the industrial environment, it is the ideal tool for force measurements in production.

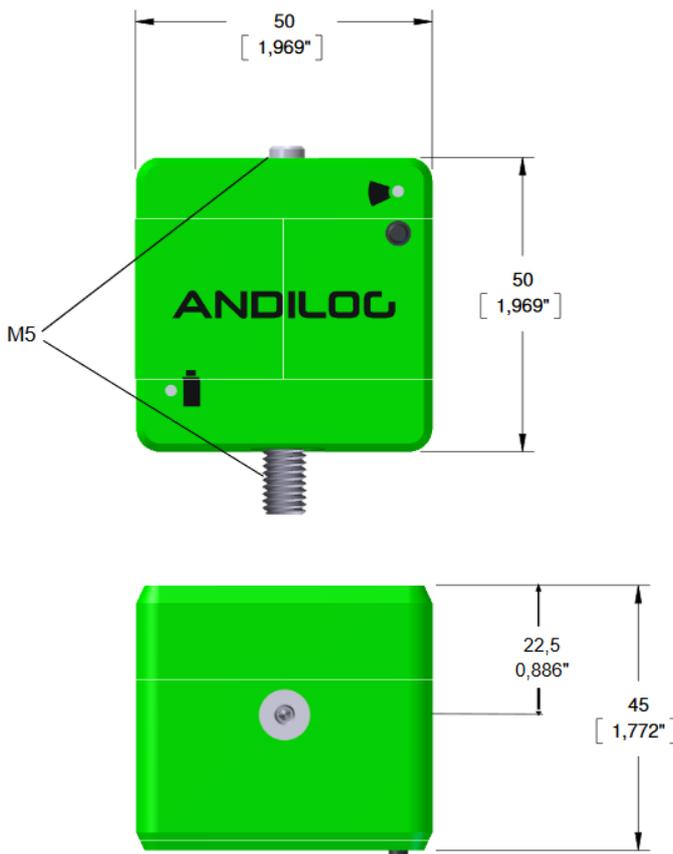
The main functions :

- Bluetooth connection with force and torque sensors of the WLC range
- Display of the maximum in both measuring directions of the sensor
- Rechargeable battery with an autonomy of 8 hours
- Maximum distance between the sensor and the Wireless Centor: 20 meters in open field
- Measuring frequency on the sensor 1 000Hz
- 3-line color display
- Charging via micro USB connector



The available sensors

Force sensor WLC SLC



The WLC SLC is the first wireless general purpose force sensor of the Andilog range. This load cell allows to perform tension and compression measurements without being hindered by a wire or being connected to a display.

| Models | Capacity | Accuracy (% Full scale) | Resolution |
|--------------|------------------|-------------------------|------------|
| WLC SLC 10 | 10 N / 2 lbs | 0.1% | 0.001 N |
| WLC SLC 25 | 25 N / 5 lbs | 0.1% | 0.0025 N |
| WLC SLC 50 | 50 N / 10 lbs | 0.1% | 0.005 N |
| WLC SLC 100 | 100 N / 20 lbs | 0.1% | 0.01 N |
| WLC SLC 250 | 250 N / 50 lbs | 0.1 % | 0.025 N |
| WLC SLC 500 | 500 N / 100 lbs | 0.1% | 0.05 N |
| WLC SLC 1000 | 1000 N / 200 lbs | 0.1 % | 0.1 N |

Ergobar

A unique solution for force measurement on trolleys and carts

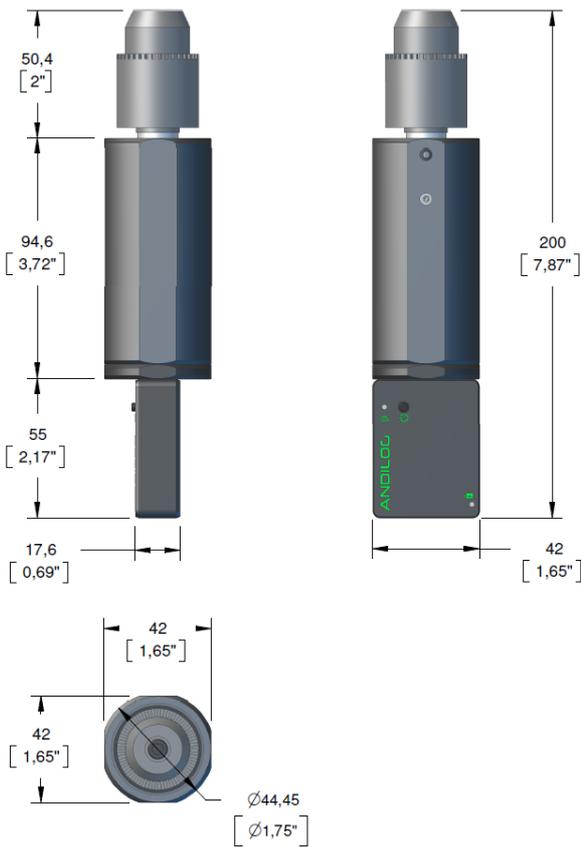
This two-handle force sensor has been specially designed to meet the needs of ergonomists and occupational physicians who wish to measure the pull-push force on trolleys such as food carts, containers, pallet trucks, hospital beds and any other type of aid for handling goods or transporting people. It provides repeatable force measurements and gives indications of the initial force and the rolling force required to move.

The Ergobar is an essential force gauge to determine which trolley is the most suitable for the working environment and the task to be performed (thermal constraints, obstacles, degraded floors, wheel material, brakes, etc.). It is also a key tool for ergonomic studies that provides you with concrete results for your proposals for improvement and optimization of working conditions: determination of the ideal weight of the loads to be moved, travel speed, slope inclination, space requirements, elevator thresholds etc.

Its high precision, ease of use and assembly on all types of trolleys and its optimal monitoring of force data make it the most practical and indispensable solution in the context of an approach to improving ergonomics in the workplace.



The available sensors



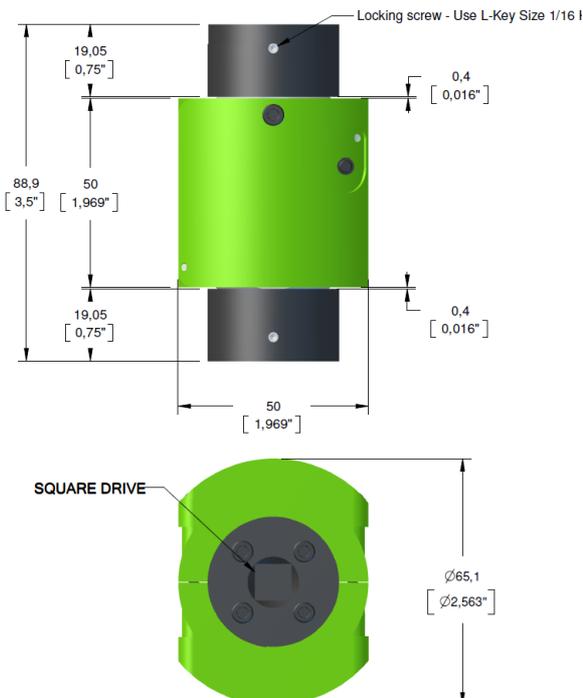
Manual torque sensor WLC TH

Ideal torque sensor for screwing and unscrewing measurements. Supplied with an opening chuck 1.5 to 10 mm (0.06-0.4 in). This chuck can be replaced by a tool with a 3/8 square drive.

| Models | Capacity | Accuracy | Resolution | Square |
|-------------|---------------------|----------------------------|-------------------------|------------|
| WLC TH 0.35 | 350 mNm (3 inlb) | +/- 0.875 mNm (0.007 inlb) | 0.035 mNm (0.0003 inlb) | Female 3/8 |
| WLC TH 1.5 | 1 500 mNm (13 inlb) | +/- 3.75 mNm (0.03 inlb) | 0.15 mNm (0.001 inlb) | Female 3/8 |
| WLC TH 6 | 6 Nm (53 inlb) | +/- 15 mNm (0.13 inlb) | 0.6 mNm (0.005 inlb) | Female 3/8 |
| WLC TH 12 | 12 Nm (106 inlb) | +/- 30 mNm (0.3 inlb) | 1.2 mNm (0.01 inlb) | Female 3/8 |

Manual torque sensor WLC TRD

Double square drive torque sensor. Ideal for mounting on a screwdriver or shaft to control operating torque. The squares can be dismantled to fix the sensor directly with screws.



| Models | Capacity | Accuracy | Resolution | Square |
|--------------|---------------------|----------------------------|-------------------------|------------|
| WLC TRD 0.35 | 350 mNm (3 inlb) | +/- 0.875 mNm (0.007 inlb) | 0.035 mNm (0.0003 inlb) | Female 3/8 |
| WLC TRD 1.5 | 1 500 mNm (13 inlb) | +/- 3.75 mNm (0.03 inlb) | 0.15 mNm (0.001 inlb) | Female 3/8 |
| WLC TRD 6 | 6 Nm (53 inlb) | +/- 15 mNm (0.13 inlb) | 0.6 mNm (0.005 inlb) | Female 3/8 |
| WLC TRD 12 | 12 Nm (106 inlb) | +/- 30 mNm (0.3 inlb) | 1.2 mNm (0.01 inlb) | Female 3/8 |

The available sensors

Torque wrench WLC TW



Torque sensor of torque wrench type. Ideal for checking the tightening or loosening torque on screws or bolts. The square of the WLC TW allows to fix any type of end cap.

| Models | Capacity | Accuracy | Resolution | Square |
|------------|--------------------|----------------------------|------------------------|--------|
| WLC TW 15 | 15 Nm (132 inlb) | +/- 0.0375 Nm (0.331 inlb) | 0.0015 Nm (0.013 inlb) | 3/8 |
| WLC TW 60 | 60 Nm (531 inlb) | +/- 0.15 Nm (1.327 inlb) | 0.006 Nm (0.053 inlb) | 3/8 |
| WLC TW 150 | 150 Nm (1327 inlb) | +/- 0.375 Nm (3.319 inlb) | 0.015 Nm (0.132 inlb) | 1/2 |

Custom-made - Torque gauge bottle



To control the quality of tightening of closures in production, most of the time, the loosening torque on the bottles is measured after the closure has been screwed or pushed in by the capping machine.

The results obtained are often very difficult to correlate with the torque actually applied during screwing for several reasons:

- The storage conditions of the bottle vary the torque. For example, if the bottle is subjected to heat or cold, the materials will shrink or expand. These variations change the release torque.
- The unscrewing torque, if measured manually, can vary according to the operator, the speed of rotation, the force exerted on the cap..
- With the unscrewing control a maximum torque value is obtained but it is not possible to see what happens during rotation and locking.

To solve all these problems, Andilog has developed a wireless torque sensor that we integrate into bottles to measure torque directly on the screwdriver in production or during development.

Universal housing WLC Connect

Switch any strain gauge sensor to wireless with the WLC Connect. This wireless amplifier allows you to add Bluetooth to your force and torque sensors. The WLC Connect is compatible with all sensors in the Andilog range.

The WLC Connect is simply placed at the end of your sensor cable and ready for use. The cable length can be customized and we deliver the sensor calibrated.



| | |
|---------------------------|--------------------------------------|
| Type of compatible sensor | All Andilog force and torque sensors |
|---------------------------|--------------------------------------|

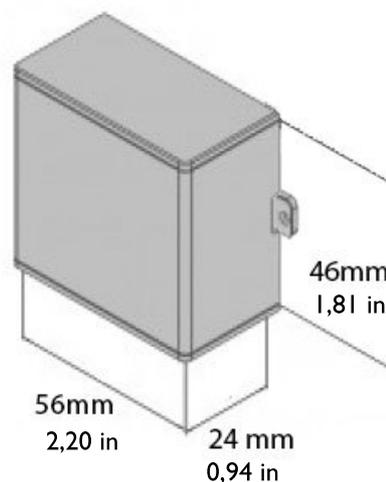
| | |
|------------|---------------------|
| Resolution | 1/10,000 Full scale |
|------------|---------------------|

| | |
|----------|-------------------------|
| Accuracy | Depending on the sensor |
|----------|-------------------------|

| | |
|---------------|---------------------------------|
| Compatibility | Caligraph and Centor Star Touch |
|---------------|---------------------------------|

| | |
|----------|----------|
| Autonomy | 10 hours |
|----------|----------|

| | |
|-------------------|----------------|
| Acquisition speed | Up to 1,000 Hz |
|-------------------|----------------|



Example of WLC sensors



| Range | Type | Capacity | Accuracy |
|--------|-----------------|----------------------------------|----------|
| WLC S2 | S-shaped sensor | 10 to 1000 N (2.25-225 lbs) | 0.1% FS |
| WLC S9 | S-shaped sensor | 2kN to 50 kN (450-11,250 lbs) | 0.1% FS |



| Range | Type | Capacity | Accuracy |
|--------|-------------------------|-----------------------------------|----------|
| WLC U9 | Sensor with male thread | 50N to 50kN (11.25-11,250 lbs) | 0.1% FS |



| | | | |
|---------|------------------------------|-----------------------------------|---------|
| WLC LLB | Miniature compression sensor | 50N to 50kN (11.25-11,250 lbs) | 0.5% FS |
|---------|------------------------------|-----------------------------------|---------|



WLC range Wireless force and torque sensors



ISO 9001:2015 Certified

HEADQUARTER

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