

**INC,LLC**

# DNTLC01 QUICKSTART

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## Quickstart Overview

The Load Cell Digitizer can be configured using 3 different data types ( INT16, INT32, or REAL32). This allows greater flexibility with different PLCs. The digitizer must first be calibrated. This is accomplished by the following steps:

### 1) Connect Wiring:

See Wiring Diagrams. **Connect the Sense+ and Sense- lines or a NO REF Error will occur.**

### 2) Set the Port X Full Scale:

This can be done using a INT16 value, a INT32 value, or a REAL32 value.

- A) For INT16 use Class 101, Instance X, Attribute 21.
- B) For INT32 use Class 101, Instance X, Attribute 31.
- C) For REAL32 use Class 101, Instance X, Attribute 41.

### 3) Calibrate the Port:

- A) **Set the Weigh Scale Port Mode to Calibrate** (Class 101, Instance X, Attribute 3, value=1).
- B) Remove weight from scale.
- C) Set the Weigh Scale Port Zero attribute to “Zero Scale” (Class 101, Instance X, Attribute 4, value=1).
- D) Add the calibration weight to the scale attached to Port X.
- E) Set the Weigh Scale Port Span attribute to the amount of the calibration weight on the scale.
  - 1. For INT16 use Class 101, Instance X, Attribute 20
  - 2. For INT32 use Class 101, Instance X, Attribute 30.
  - 3. For REAL32 use Class 101, Instance X, Attribute 40.
- F) **Set the Weigh Scale Port Mode to Normal** (Class 101, Instance X, Attribute 3, value=0).

### 4) Read Weight Value:

The Calibrated Port is now able to convert the load cell signals to the corresponding weight values.

The Gross Weight value can be read using I/O data or through the following:

- A) For INT16 use Class 101, Instance X, Attribute 22.
- B) For INT32 use Class 101, Instance X, Attribute 32.
- C) For REAL32 use Class 101, Instance X, Attribute 42.

### 5) To Zero Scale:

The scale can be zeroed using explicit messaging or through the I/O Control Data.

- A) Set the Weigh Scale Port Zero attribute to “Zero Scale” (Class 101, Instance X, Attribute 4, value=1).
- B) Set the Zero Port Corresponding bit in the I/O control data to a 1. This bit will be echoed back in the I/O Status attribute when the zero scale is complete. The PLC can now set the Zero bit back to 0 to allow normal operation.

### 6) To Tare Scale:

The scale can be Tared using explicit messaging or through the I/O Control Data.

- A) Set the Weigh Scale Port Tare attribute to “Tare Weight” (Class 101, Instance X, Attribute 5, value=1).
- B) Set the Tare Port Corresponding bit in the I/O control data to a 1. This bit will be echoed back in the I/O Status attribute when the tare scale is complete. The PLC can now set the Tare bit back to 0 to allow normal operation. The Gross, Tare, and Net values now can be read.