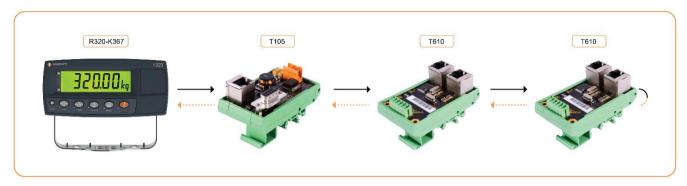


APPLICATION NOTE

Application



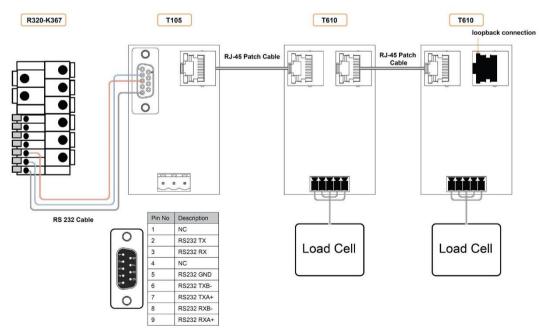
This application is used to display weight readings and change set points in two T610 weight transmitters connected through a ring network to an **R320** indicator with **K367 firmware**. This firmware supports up to 31 slave devices in a single ring network.

Components



Wiring Configuration

The following schematic shows the wiring configuration for this application.



The R320 with K367 firmware will be connected to the T105 using an RS 232 serial cable. The two T610s will be connected as follows: The first T610 will be connected to the T105 using an RJ-45 patch cable. The other T610 will be connected to the first T610 using another RJ-45 patch cable. The second

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APPLICATION NOTE

T610 has a loopback connection, which completes the ring network. Both T610s are connected to a 100kg Load Cell. Further, the T105 provides power to the T610 weight transmitters.

Displaying weight readings from T610s

Weight can be displayed in two different modes

- 1. Total mode: Total mode shows the aggregate of the weights of all slave units in the ring network. Both slaves should be configured similarly in terms of decimal point, gross/net, and unit of measure. Total mode is enabled by default when the system is powered on.
- 2. Mimic Mode: Displays the weight of a selected T610 unit. The Print key can be used to change the selected unit. A selected slave unit can be operated on remotely using the Zero, Tare and select keys on the master unit. The configurations for each slave unit can also be changed.

Operation: Mimic functionality

Mimic functionality of the K367 firmware can be accessed as follows:

- 1. Press the Print key once to see which scale is selected. The current selection is shown on the LCD (e.g. SCL 2) for 0.5 seconds and reverts to displaying the selected scale's weight reading after this timeout. In total mode, 'total' will be displayed.
- 2. Press the Print key twice to change selection. If you press Print before the 0.5 second timeout happens, the next scale is selected. Wait for 0.5 seconds once the intended slave device is selected. The scales will be selected in a round-robin order and will go back to total mode before the first scale is selected again.
- 3. Long press the Print key to go to total mode.

Operation: Changing Setpoints in T610s

Setpoints in a T610 can be changed in full setup in mimic mode as follows:

- 1. Select the scale in mimic mode using the Print key.
- 2. The full setup of the T610 can be accessed by pressing the **PWR** and **FN** keys simultaneously.
- 3. Select SET.PTS from the menu. The full setup menu is indicated below.

FULL SETUP

```
BUILD
            : setup as required
OPTION
            : setup as required
            : setup as required
CAL
SERIAL
            : setup as required
SET.PTS
       SETPT.1
                   : set to OVER
                   : set to DISP
       SRC
       TARG.1
                   : set to 00020 kg
                   : set to OVER
       SETPT.2
       SRC
                   : set to DISP
       TARG.3
                   : set to 00040 kg
TEST
FACTRY_
END
```

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APPLICATION NOTE

Error Messages

The following messages may be displayed during normal operation.

Error message	Description
"-Err-"	Data absent. Data not available up to 5 seconds. Ring network error.
"Add.Err"	Address error. If more than one slave has the same address.
"Exxxx"	Error in one of the slave units. This is not an error in the master. Refer reference manual of the slave unit.
"SYN.Err"	All slaves are not in the same gross or net state.
"UNT.Err"	All slaves do not have the same unit of measure.
"dp.Err"	All slaves do not have the same number of decimal points.
"O"	Overload one of the slave units in the network.
"U"	Underload one of the slave units in the network.

For more information, please refer reference manuals for R300 Series K367 and T Series Reference Manual.

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