

Setting Up an SEM210 for A Slidewire Input

1. Download the Status M-Config software onto your computer from the Status Instruments, Inc. website (www.statinst.com) by clicking on the “**Downloads**” button on the Home Page, then click “**Software**”, then click “**M-Config (download)**”.
2. Connect the RCPW configurator to the RS232 port of your computer and connect the SEM210 to the configurator by connecting the Red wire to the positive output terminal and the Black wire to the negative output terminal.
3. Open the M-Config software and click on the “Head Mounted” tab on “Select a device” window.
4. Click on the “SEM210” icon.
5. Click on the Green Arrow icon on the tool bar at the top of the screen. This will read the present configuration of the SEM210.
6. To make sure that the memory in the unit is cleared you **MUST** first re-range the unit to the factory default settings (even if it appears to be set to the factory default):

Factory Default Setting are:

Under Input Tab set the following:

Sensor: **RTD**
Temperature Units: **Degrees C**
Linearization: **BS1904**
Burnout: **High**

Under Current Re-Tx Tab

Low Range: **0.0**
High Range: **100.0**

7. Click on the Red Arrow icon on the tool bar at the top of the screen. This will send the new configuration of the SEM210.
8. Now set up the SEM210 for the Slidewire configuration:

Under Input Tab set the following:

Sensor: **Slidewire**

Under Current Re-Tx Tab

Low Range: **0.0**
High Range: **100.0**

9. Click on the Red Arrow icon on the tool bar at the top of the screen. This will send the new configuration of the SEM210.

Physically Configuring The Model SEM210 for Slidewires Of Various Resistances

The SEM210 transmitters can be setup for use with a slidewire input of 10 ohms to 390 ohms. To use the SEM210 with a slidewire of greater than 390 ohms resistance you must put a resistor of a specific value across terminals 3 and 5 of the transmitter.

To use the SEM210 with a three wire **slidewire of 2K ohms** you must add a **484.5 ohm external resistor across terminals 3 and 5 of the transmitter.** (see below calculations)

$$1/R_T = 1/R_1 + 1/R_x$$

$$1/390 = 1/2000 + 1/R_x$$

$$0.002564 = 0.0005 + 1/R_x$$

$$1/R_x = 0.002564 - 0.0005 = 0.002064$$

$$R_x = 1/0.002064 = 484.496 \text{ ohms}$$

For a **slidewire of 10K ohms** you need an **external resistor of 406.5 ohms.**

