

Application Note

Using the Transmitter Power Supply card on I/8 DIN and I/4 DIN Controllers.

Product: 8100,8170,8200,8600,4100,4170,4200,4700.

As part of the development of the West Instruments I/8 DIN Process Indicator, the 8010 a transmitter power supply (TPS) board has been implemented. *The TPS board is of a plug-in construction and can be used on ALL I/8 and I/4 DIN Controller models.*

Note: The TPS board will not operate correctly if fitted to a 1/16 DIN product. Under no circumstances should this be attempted.

This application note gives details of how to set the Controller up for use with the TPS board.

Note that the TPS board is only available as a separate item. It can not be ordered as part of the Controller. The 8010 can be ordered with the TPS board as part of the product. The TPS card can be placed in either output position two or three. To use the card the instrument must be configured in the following manner:

In Configuration Mode perform the following:

- 1 The hardware definition code of the output position for the TPS card must be set to '1'.
- 2 . The output use for the output position chosen for the TPS card must be set to 'LP-r'

Note that by doing this, the loop alarm is not available for use with this application and should be left in the default condition of disabled. The intention of this configuration is to permanently enable the TPS. The reason the TPS is gated in this manner is so that the TPS can be shut down during power down to avoid excessive loading during this time.

If the application requires a loop alarm, the desired gating can be achieved using an alarm. The method involves setting the product into a state where the relay would be energised at all times during running. For example a process low alarm reverse acting with the default setting of range minimum and knowledge that the process will never go under range (note sensor break would go over range which is OK in this application). "AND"ing alarm one and two gives another foolproof method but does sacrifice both alarms to this function (note: use Ad-r' not Ad-d').

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