



Isolated Transmitters: 600T Series

Application Notes

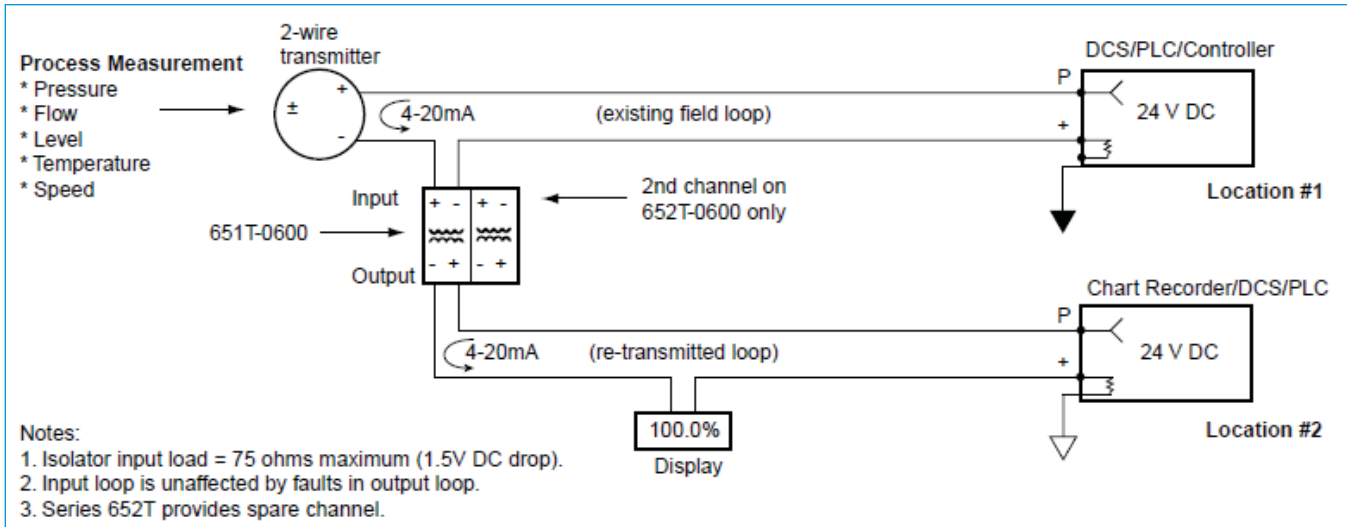


Application 1

Retransmitting a signal from a two-wire loop to a second location.

Solution

Use either a model [651T-0600](#) (single channel) or [652T-0600](#) (dual channel) transmitter.

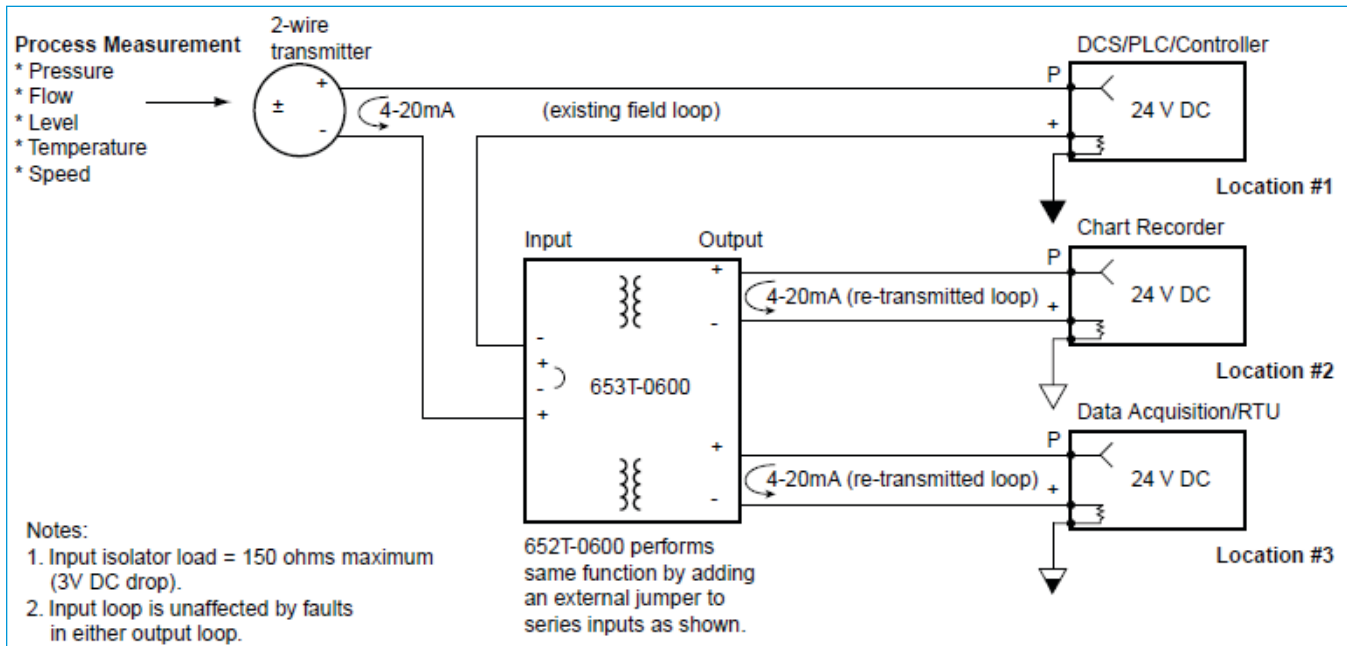


Application 2

Splitting a signal from a two-wire loop: two outputs for different locations.

Solution

Use either a [653T-0600](#) (single input, dual output) or [652T-0600](#) (dual input, dual output) unit.





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Application Notes



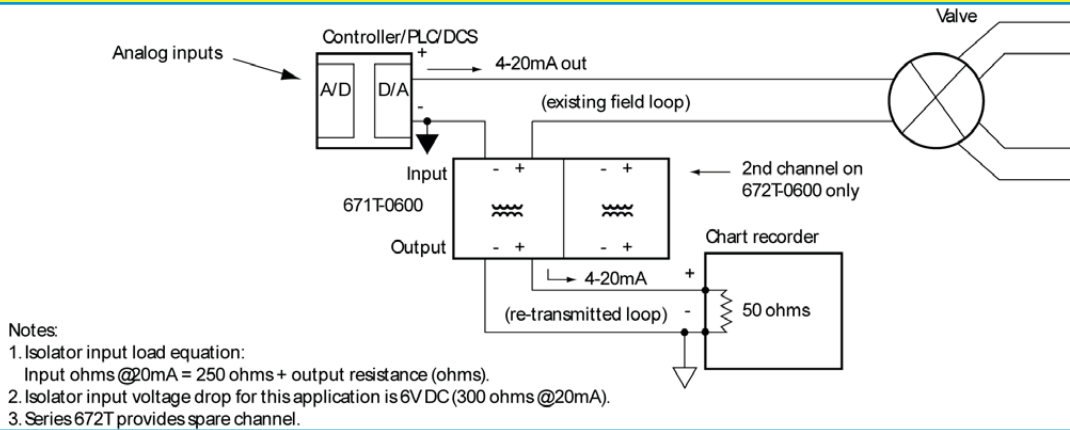
Application 3

Retransmitting a signal output from a controller or a D/A card.

Solution

Use either a model [671T-0600](#) (single channel) or [672T-0600](#) (dual channel) transmitter.

IMPORTANT: The 671T transmitter is an input loop powered current isolator. Its input voltage burden is normally a function of its output voltage drop and is computed as $4.9V + I_{out} \times R_{out}$. If the output load resistance R_{out} is excessive relative to the input loop voltage, or R_{out} is open-circuited, the input voltage burden may increase up to the limit of available input loop voltage. Consequently, if there are any loop-powered transmitters connected in series in the 671T input loop, this output loop fault can pinch-off excess input loop voltage, reducing the available voltage to power any series-connected transmitters in the loop, potentially causing them to lose regulation of the input loop current. You could select a different current isolator than 671T, or a different series transmitter that is separately powered to avoid this fault condition.

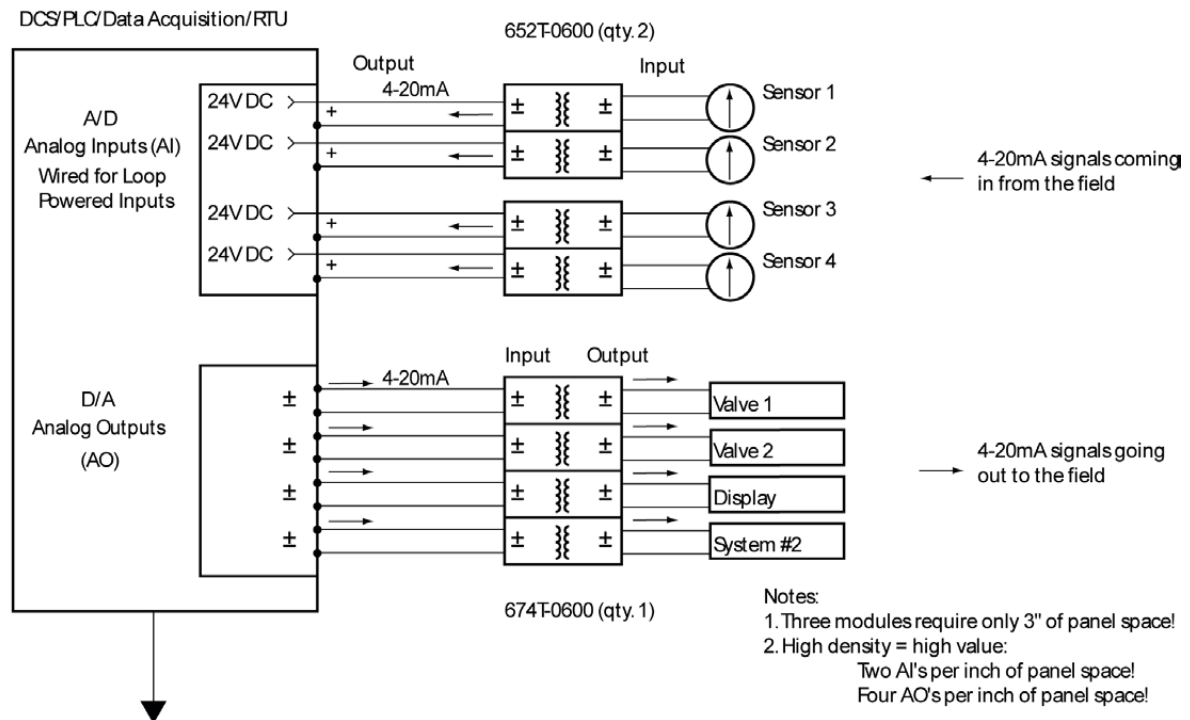


Application 4

Low-cost, channel-to-channel isolation of 4-20mA signals for controllers.

Solution

Use either a [652T-0600](#) (dual channel) for A/D cards or a [674T-0600](#) (quad channel) for D/A cards.





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600T Application Notes



Application 5

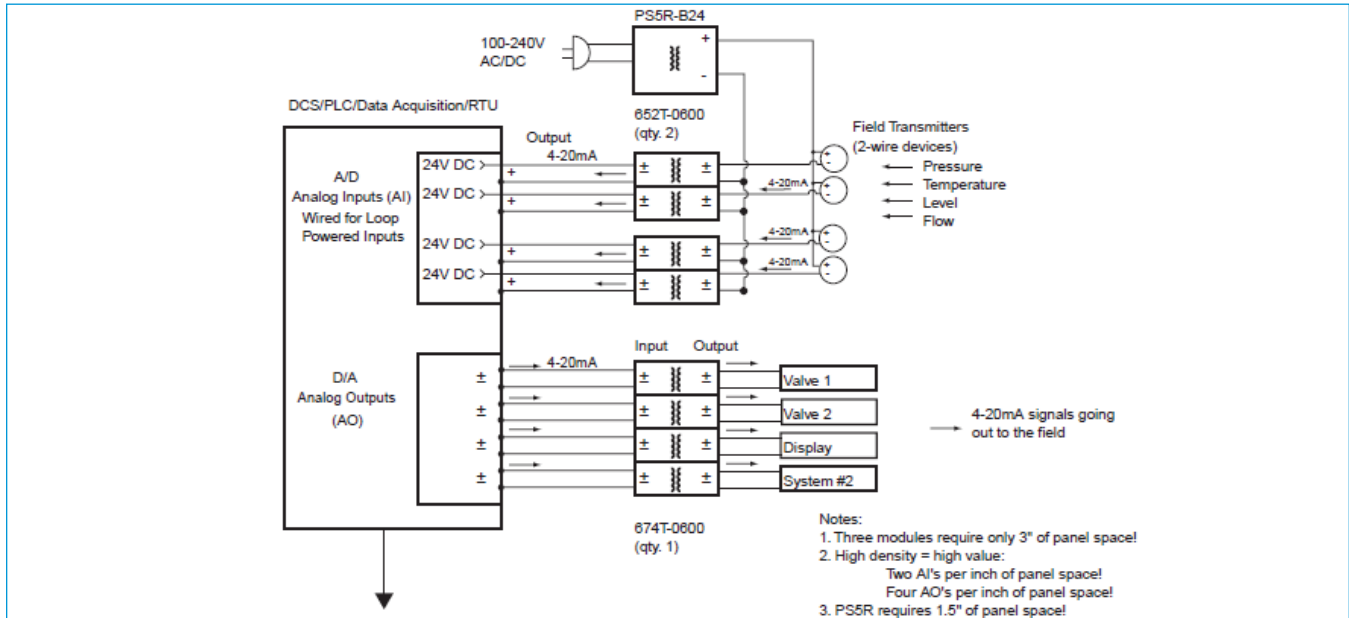
Powering field transmitters (2-wire) and providing low-cost isolation of 4-20mA signals for controllers.

Solution

Model [652T-0600](#)

Model [674T-0600](#)

Model [PS5R-SB24](#)



Application 6

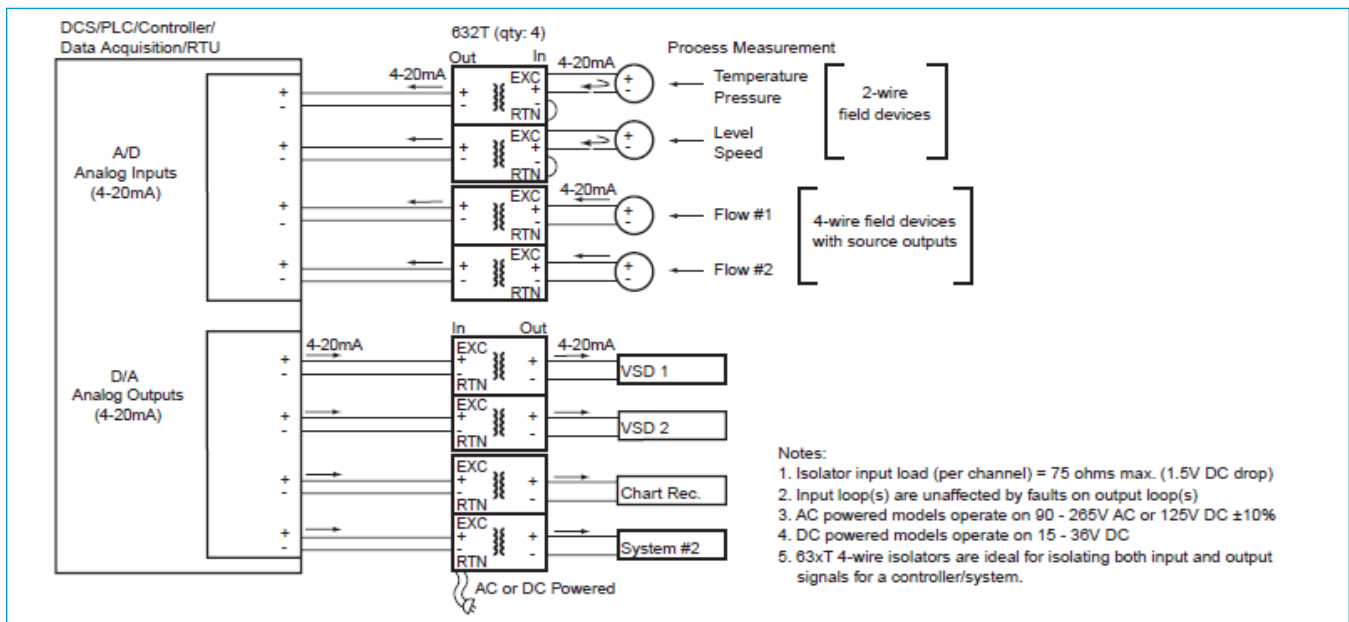
Require 4-wire isolators for input and output signals for controller. Built-in excitation supply needed for some field 2-wire devices.

Solution

Model [632T-0100](#) (dual channel, AC powered) or

Model [632T-0500](#) (dual channel, DC powered).

Model [631T](#) for single channel 4-wire isolators.





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630T Application Notes



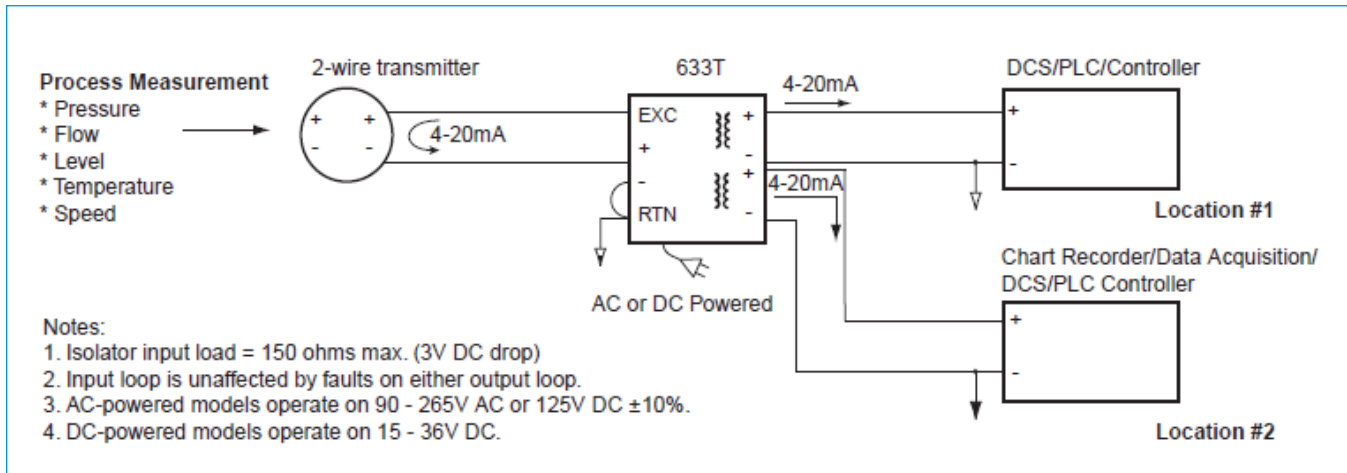
Application 7

Require a 4-wire isolator "splitter" to excite a field device and re-transmit 4-20mA to two locations.

Solution

Model [633T-0100 \(AC powered\)](#) or
Model [633T-0500 \(DC powered\)](#).

Use additional 633T units for re-transmitting to more locations. Install inputs in series with primary 4-20mA loop or the re-transmitted loops as required.



Application 8

Require 4-wire isolators to retransmit a 4-20mA signal to three locations.

Solution

Model [631T-0x00 \(splitter\)](#) and
Model [633T-0x00 \(one channel isolator\)](#).
(Where x = 1 or 5 for AC or DC power)

