

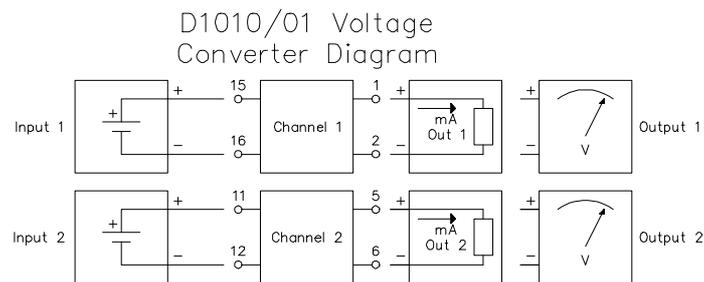
**Application Note APN0011 for barrier model:**

D1010S/01            1 channel Repeater Power Supply DIN Rail  
D1010D/01            2 channels Repeater Power Supply DIN Rail

This application note is intended to be read and used in conjunction with the D1010 data sheet DTS0016 and Installation Sheet ISM0007.

**Application**

The unit D1010D/01 is modified to interface a voltage signal input and to converter to a 4-20 mA or 1-5 V output signal. The input range is equal to  $-1$  to  $+5$  V, corresponding to a 4 to 20 mA output (or 1-5 V). The signal can be connected with reverse polarity to obtain a  $+1$  to  $-5$  V corresponding to a 4 to 20 mA. The schematic diagram is shown in the following figure:



Note: Power supply connection and sink mode outputs not shown on the diagram

Note that some restrictions may apply:

- **The unit is not intrinsically safe.**
- Input impedance is  $\geq 100\text{ K}\Omega$
- bi-directional communication for smart transmitter is not present.

The barrier outputs are fully isolated from supply and must be used when ground loop should be avoided<sup>[MF1]</sup>.