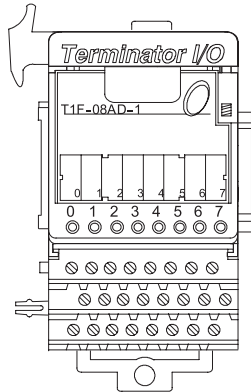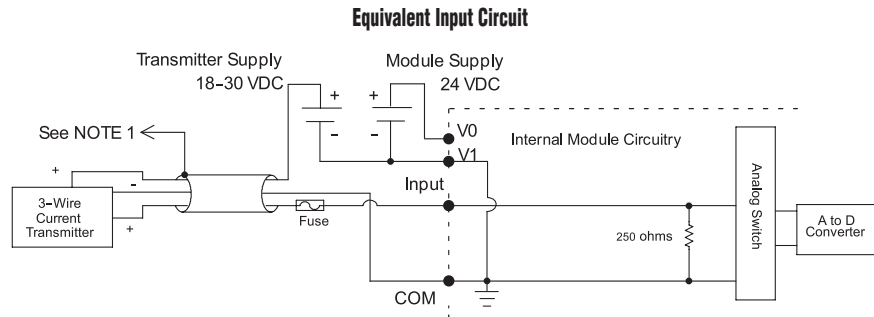# Analog Current Input Module

T1F-08AD-1

8-channel analog current input module

The 8-channel current input module uses a T1K-08B or T1K-08B-1 base, which is purchased separately.

T1F-08AD-1 Analog Input Specification	
Number of Channels	8, single-ended (1 common)
Input Ranges	-20 to 20 mA, 0-20 mA, 4-20 mA
Resolution	14 bit (13 bit plus sign bit)
Frequency Response	-3 db @ 500 Hz, -20 db/decade
Input Resistance	250 Ω
Absolute Max. Ratings	8V max. input
Conversion Time	Normal mode: 5 ms per channel (default); Fast mode*: 0.5 ms per channel
Linearity Error	± 2 counts max.
Input Stability	Normal mode: ± 1 count (default); Fast mode*: ± 5 counts
Full Scale Error (Offset Error Not Included)	16 counts max.
Offset Error	2 counts max.
Max. Full Scale Inaccuracy (% of full scale); All errors included	0.18% @ 25°C 0.36% @ 60°C
Master Update Rate	8 channels per scan max.
Input Points Required	256 discrete pts. or 8 Dwords (32-bit words) (Network interface dependent)
Base Power Required	75 mA @ 5 VDC
External Module Power Required	21.6-26.4 VDC, 50 mA, class 2
Recommended Fuse	0.032 A, Series 217 Fast Acting
Weight	136 g

* Fast mode supported in module hardware version B or later.

Equivalent Input Circuit

NOTES:

1: Shields should be grounded at the signal source.

2: More than one external power supply can be used, provided all the power supply commons are connected.

3: A Series 217, 0.032A fast-acting fuse is recommended for 4-20 mA current loops.

4: If the power supply common of an external power supply is not connected to the 0V terminal on the module, then the output of the external transmitter must be isolated. To avoid "ground loop" errors, recommended 4-20 mA transmitter types are:
- For 2 or 3 wire connections: Isolation between the input supply signal and the power supply.
- For 4 wire connections: Isolation between the input supply signal, the power supply and the 4-20mA output.

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

TB's & Wiring

Power

Enclosures

Appendix

Part Index