## Analog Input Module - 40 Channel (T8431)

The TMR 24V dc analog input module, shown in Figure 6-10, interfaces to 40 sourcing field input devices. The module acts as a current sink for the devices.

The module can detect open and shorted field cables using the built-in linemonitoring feature. Line monitoring functions are independently configured for each input channel.

The module provides on-board sequence of events (SOE) reporting with a resolution of 1ms. A change of state triggers an SOE entry. States are determined by voltage thresholds that can be configured on a per channel basis.

The input status LED mode is dependent upon the voltage level of the field I/O signal. Each field input voltage is measured and compared to six threshold levels (four configurable and two fixed) which produce seven threshold bands, as described in Section 8. Each threshold band can be defined to have a particular indicator mode: off, solid or flashing green, or solid or flashing red. One *example* of LED indications for analog inputs would be:

Indicator State	Description
Off	Under-range
Red – flashing	Line fault
Green – steady	Low
Green – steady	Normal
Green – steady	High
Green – steady	High-High
Red – flashing	Over-range
Red – steady	Unknown

Table 6-4: Example of Analog Input Module LED Indications



Figure 6-10: Analog Input Module