

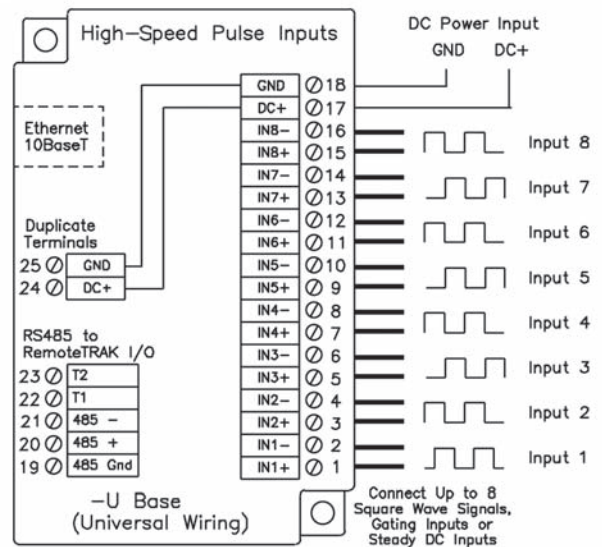
## High-Speed Counters

### PRODUCT HIGHLIGHTS

- Count rates to 50 KHz with 32-bit results
- Measure pulses from milliseconds to a minute
- Direct position detection from quadrature encoders
- Individually isolated inputs for best noise immunity
- Count inputs also report as discrete inputs
- Support for hardware gating and software resets

### PERFORMANCE SPECIFICATIONS

- 8 counters
- Count mode performance: guaranteed count rate 50 KHz
- 32 bits Count resolution
- Rate (frequency) mode performance:
  - Maximum input rate 50,000 per sec
  - Shortest measurement period 10 mS
  - Longest measurement period 1 min
- Position mode performance:
  - Maximum position axis (2channels/axis) 4
  - Maximum pulses per second 25,000
  - Maximum quadrature states per second 100,000
  - Position resolution 32 bits
- Input performance:
  - Guaranteed count input voltage 4 Volts
  - Maximum count input voltage 30 Volts
  - Guaranteed off input voltage 1.5 Volts
  - Nominal count input current 8 mA
- Required supply voltage 10-30 VDC (1.4 watt typical)
- Operating temperature range -30 to 70° C
- Storage temperature range -40 to 85° C
- Humidity (non-condensing) 5 to 95%



### RS485 PORT FOR I/O EXPANSION

- 32 Max. RS485 stations (up to 512 I/O)
- Baud rate: 38,400 bps
- Recommended distance of up to 0.5 mile
- Protocol: Sixnet "I/O for Windows", Modbus ASCII & RTU
- Isolation (from Ethernet port) 1200 Volts RMS 1 minute

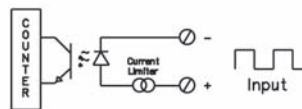
**Note:** A pair of counter channels can be combined to make a 32-bit up/down counter or accumulator.

### ORDERING INFORMATION

- ET-8CNT-U 8 High-Speed Counters w/base
- ET-8CNT-M Replacement module only

All specifications are subject to change. Consult factory for latest info.

Typical Count/Rate Input Circuit



Typical Position Input Circuit

