

Triconex - DCS System

3511

8-channel TMR Pulse Input Module

Technical specifications

Input signals	8, non-commoned
Input type	AC-coupled, balanced differential
Input frequency range	20 Hz to 20 kHz
Accuracy at 1 kHz to 20 kHz	±0.01%
Accuracy at 100 Hz to 999 Hz	±0.01%
Accuracy at 20 Hz to 99 Hz	±1.0%
Typical update rate	25 ms
Load impedance	> 8 kΩ; 20 kΩ typical
Common-mode range	-100 V to +100 V peak-to-peak
Normal-mode range	1.5 V to 200 V peak-to-peak
Over-range protection	±150 VDC continuous
Typical sensitivity	0.5 V peak-to-peak sine wave
Worst-case sensitivity	1.5 V peak-to-peak sine wave
Logic power	< 20 W
Point indication	One input-activity indicator per point
Module indicators	Pass, Fault, Active

Description

Triconex 3511 is an eight-channel, non-commoned TMR pulse input module for AC-coupled balanced-differential signals from speed-sensing field devices.

It measures pulse frequency for rotating equipment monitoring with a typical 25 ms update rate and channel diagnostics designed for high-integrity turbomachinery applications.

Applications

- Turbine shaft-speed measurement
- Compressor shaft-speed measurement
- Turbomachinery protection and critical speed monitoring

Technical note

Triconex 3511 requires verified sensor amplitude, frequency, shielding and scaling; rapidly changing inputs can cause channel mis-compares, so validate the complete speed-measurement loop.

Evidence boundary

The Tricon planning guide explicitly identifies Model 3511 and its channel count, frequency range, accuracy bands, update rate, electrical limits and diagnostics.