

Meridian Laboratory EtherCAT Slip Ring Test

General Requirements and Test Results*

EtherCAT Specifications	EtherCAT Values
Low Latency for 100 BASE-TX @ full bandwidth (100Mbps)	0.75 us - 1.5 us (round trip)
Low Bit Error Rate (BER)	≤ 1 out of 10^8 bits

Ethernet Testing Values Summary Table:

Test	Results	EtherCAT Requirements	Test Result
Latency	0 RPM: 1.36 us 70 RPM: 1.36 us 500 RPM: 1.36 us	0.75 us - 1.5 us	Pass
Bit Error Rate (BER)	0 RPM: 0 bits 70 RPM: 0 bits 500 RPM: 0 bits	1 out of 10^8 bits	Pass

Packet Expert Test Documents Table:

Test	Speed	Test Result	Test Documents
Propagation Delay	0 RPM	Pass	Please contact Meridian Laboratory for data
Propagation Delay	70 RPM	Pass	Please contact Meridian Laboratory for data
Propagation Delay	500 RPM	Pass	Please contact Meridian Laboratory for data
BER	0 RPM	Pass	Please contact Meridian Laboratory for data
BER	70 RPM	Pass	Please contact Meridian Laboratory for data
BER	500 RPM	Pass	Please contact Meridian Laboratory for data

* All Ethernet Testing including variation of packet size from 64 - 1432 byte