CONTROL TECHNIQUES

SI-POWERLINK

CONNECT TO ALL POWERLINK NETWORKS

INDUSTRIAL CONTROL

NEW

DRIVE OBSESSED

SI-POWERLINK
UNIVERSAL CONNECT

Control Techniques has set the standards in motor control since 1973.

SI-POWERLINK serves applications ranging from simple open-loop systems through to those demanding precise motion control.

POWERLINK is a communications protocol based upon standard Ethernet, and provides a solution for real-time Industrial Ethernet to satisfy the requirements of industrial automation and process control. High-speed, deterministic response times are ensured via a mix of time-slot and polling procedures.

POWERLINK is used in applications in industries including automotive, energy management, machinery, industrial automation, railway and maritime transportation, robotics, vision systems and many more.

SI-POWERLINK Overview

SI-POWERLINK is compatible with our Unidrive, Commander, Digitax & Pump drive families and conforms to the latest release of the POWERLINK standard.

Functionality of SI-POWERLINK:

- Full cyclic (PDO) and non-cyclic (SDO) access to all drive parameters
- PDO cycle times down to 500 µs
- Drive synchronisation supported on Unidrive M600, M70x and Digitax HD M75x
- CT PLCopen Function Block Support in B&R Automation Studio

CiA402 Profile Support	High Performance	General Purpose
	Unidrive Digitax	Commander Pump Drive
Cyclic Sync Position Mode	Yes	No
Cyclic Sync Velocity Mode	Yes	No
Cyclic Sync Torque Mode	Yes	No
Interpolated Position Mode	Yes	No
Homing Mode	Yes	No
Profiled Position Mode	Yes	No
Profiled Velocity Mode	No	No
Velocity Mode	Yes	Yes
Profiled Torque Mode	No	No

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SI-POWERLINK Specification

Drive Range		High Performance	General Purpose
General		Unidrive, Digitax	Commander, Pump Drive
	Maximum number of modules per drive	1	1
	Smartcard parameter backup/restore	Supported	
	Maximum number of drives on single POWERLINK network	As defined by POWERLINK standard	
Cyclic Data (PDO)	Drive Parameter Access	All drive parameters accessible	
	Maximum parameter mappings per PDO	32	Examples of supported configurations: - 8 x 32 bit parameters IN and 8 x 32 bit parameters OUT, or - 16 x 16 bit parameters IN and 16 x 16 bit parameters OUT, or - 32 x 8 bit parameters IN and 8 x 32bit parameters OUT
	Maximum RPDO + TPDO buffer size, e.g. the total number of bytes that can be transmitted and received	64 bytes	
	Inter-option Parameter communication	Not currently supported	N/A
	Minimum network cycle time	500 µs	
	Minimum drive parameter update rate (read/write)	500 µs	20 ms
	Drive control loop synchronisation	Supported	N/A
Non-cyclic data (SDO)	Drive Parameter Access	Supported	
	Inter-option parameter communication	Supported	N/A
	Minimum drive parameter update rate (read/write)	10 ms	50 ms

Ordering Guide

Option Module	Order Code
SI-POWERLINK	82400000021600

Communications, Machine Control, Feedback

Integration is at the heart of everything we do. Our modular drive expansion systems are designed to allow integration into virtually any setup, no matter which communication protocol you use.

Our communication, I/O, feedback and machine control modules ensure anyone can experience the benefits of Control Techniques drives.

Communications

SI-POWERLINK

SI-Ethernet

SI-EtherCAT

SI-PROFINET RT

SI-CANOpen

SI-PROFIBUS

SI-DeviceNet

SI-Interbus

Machine Control

MCi210

MCi200

PTi210 PowerTools

SI-Applications Compact

Feedback

SI-Encoder

SI-Universal Encoder

I/O

SI-I/O

Remote I/O

Safety

MiS210

SI-Safety

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