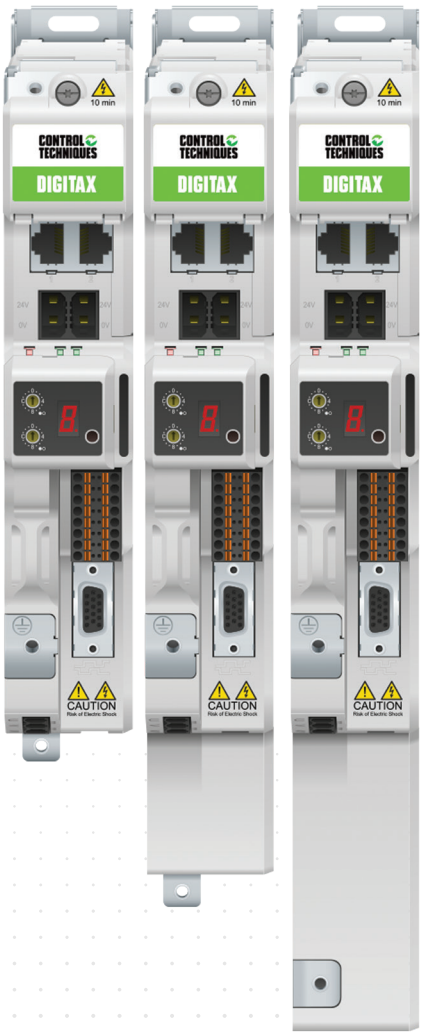
CONTROL TECHNIQUES



DIGITAX M754

MINIMUM SIZE, MAXIMUM PERFORMANCE

SERVO DRIVES

NEW

DRIVE OBSESSED

DIGITAX M754

OUR SMALLEST SERVO DRIVE JUST GOT SMARTER

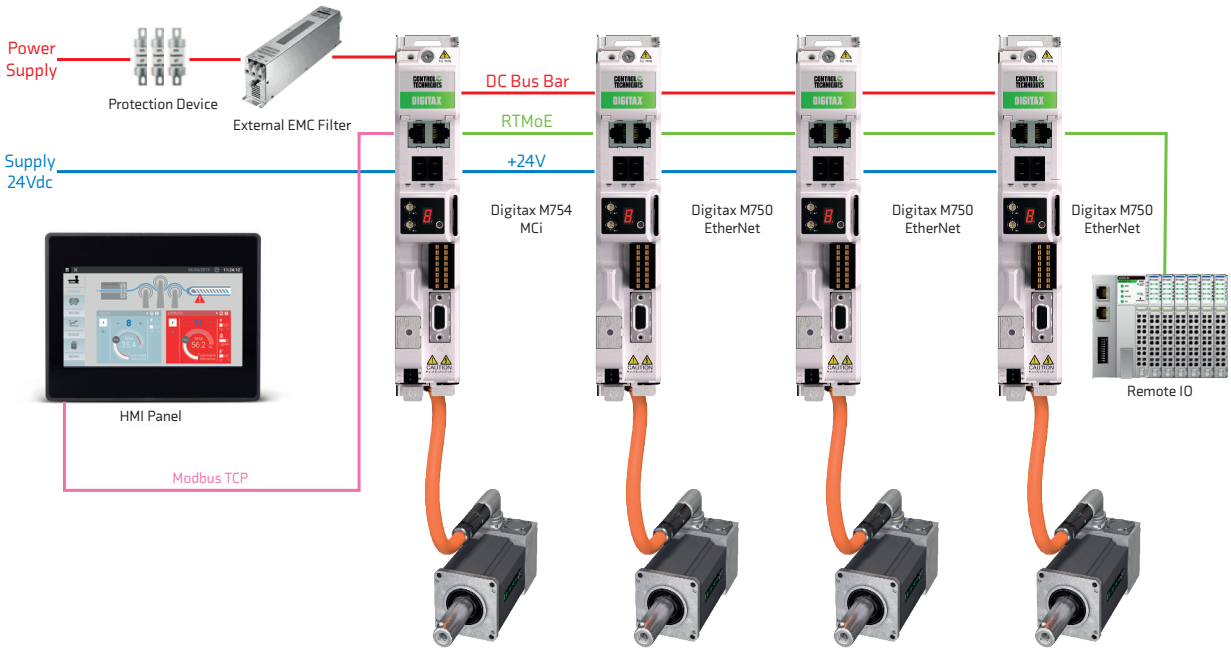
Control Techniques has set the standards in motor control since 1973.

A powerful MCi second processor onboard the Digitax M754 servo drive brings a whole host of machine design opportunities.

Digitax HD is one of the smallest servo drives on the market today. The M754 variant brings space reduction to the next level by removing the need for an external PLC.

Build high performance systems and productive machines

- The onboard MCi processor executes comprehensive programs that can control multiple drives and motors simultaneously across real-time networks
- Onboard Ethernet using RTMoE (Real Time Motion over Ethernet) provides synchronization and communication between drives using the Precision Time Protocol (PTP) as defined by IEEE1588 V2
- Simple integration with external components such as Remote I/O, HMIs and PLCs can be achieved with Modbus TCP/IP on the integrated 2-port standard Ethernet switch.



Scaleable Drive Based Motion

Every Digitax HD servo drive integrates a 1.5 axes Advanced Motion Controller (AMC), allowing motion functions to be synchronously carried out on the drive at 250 µs cycle time, minimising system latencies and maximising performance. By implementing motion control on the drive, the system design can be liberated from being tied to specific PLC vendors, at the same time reducing the computational load on the external PLC or even replacing it altogether.

Simple on-board logic 1.5 axis	Other Digitax Variants	Full machine controller 1-4 axes Digitax M754
	AMC	M754
Minimum cycle time	250 µs	250 µs
Multi-axis control	1.5 axis	1-4 axes
Speed control	✓	✓
Positioning	✓	✓
Motion profile generator	✓	✓
Homing functions	✓	✓
Simple cam profiles	✓	✓
Advanced cam profiles		✓
High speed position freeze	✓	✓
Digital cam switch		✓
	Drive based	

The powerful MCi second processor onboard of Digitax M754 extends the drive's system and machine control capabilities to run application programs up to four times faster than a standard PLC.

MCi programs can access and manage the drive's embedded Advanced Motion Controller across the Ethernet network, providing perfectly synchronised multi-axis machine performance.

Programs are fast and easy to develop thanks to the user friendly Machine Control Studio software which uses industry standard IEC 61131-3 programming languages.

MACHINE CONTROL STUDIO
FAST PROGRAMMING AND COMMISSIONING

The Machine Control Studio programming environment provides a flexible and intuitive environment for programming automation and motion control features.

The software provides programming for:

- Onboard PLC
- Onboard machine controller (MCi)
- Ethernet network data configurations

Productivity features also supported:

- Intuitive IntelliSense functionality helps to write consistent and robust programs speeding up software development
- Programmers have access to a vibrant open-source community of function blocks
- Machine Control Studio also supports customers' own function block libraries

Familiar automation programming language

The programming environment is fully IEC 61131-3 compliant and therefore familiar, fast and easy to use for control engineers around the world. The following IEC 61131-3 programming languages are supported:

- Structured Text (ST)
- Function Block Diagram (FBD)
- Structured Function Chart (SFC)
- Ladder Diagram (LD)
- Instruction List (IL)
- Continuous Function Chart (CFC)

Approved Control Techniques Distributor:

Part No. 0781-0530-01 0/21