

# CONTROL TECHNIQUES



# UNIDRIVE M

MULTI-PROTOCOL DRIVES  
AC DRIVES, HIGH PERFORMANCE

**NEW**

**DRIVE OBSESSED**

UNIDRIVE M

# VERSATILITY AND FLEXIBILITY GUARANTEED

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

Control Techniques' philosophy has always been to support innovators, regardless of which communications protocol they use. It's for them that we've developed the most flexible high-performance drive platform on the market.

Ethernet-based control networks have taken the place of traditional serial communications fieldbuses. Supporting this shift in technology was a key element in the design of our Unidrive M platform, enabling integration across a range of popular communications protocols.



200  $\mu$ s drive-to-drive  
synchronisation data transfer

EtherNet/IP™

Support for RPI as low as 2 ms



Maximum of up to 10  
concurrent connections




Support for 1 ms cyclic  
link cycle times



0.75 kW - 2.8 MW Heavy Duty  
(1.0 hp - 4,200 hp)  
200 V | 400 V | 575 V | 690 V



A background image of an industrial robotic arm in a factory setting, with blue and green lighting effects. The arm is composed of several thick, braided metal cables and is positioned vertically. The background shows a complex network of metal beams and structural elements.

Now, Control Techniques has gone one step further, by expanding the protocols supported as standard by our Unidrive M drive series. This means users of EtherNet/IP, Modbus/TCP, RTMoE and now PROFINET RT can use a single drive platform across their entire system without having to rely on different add-ons

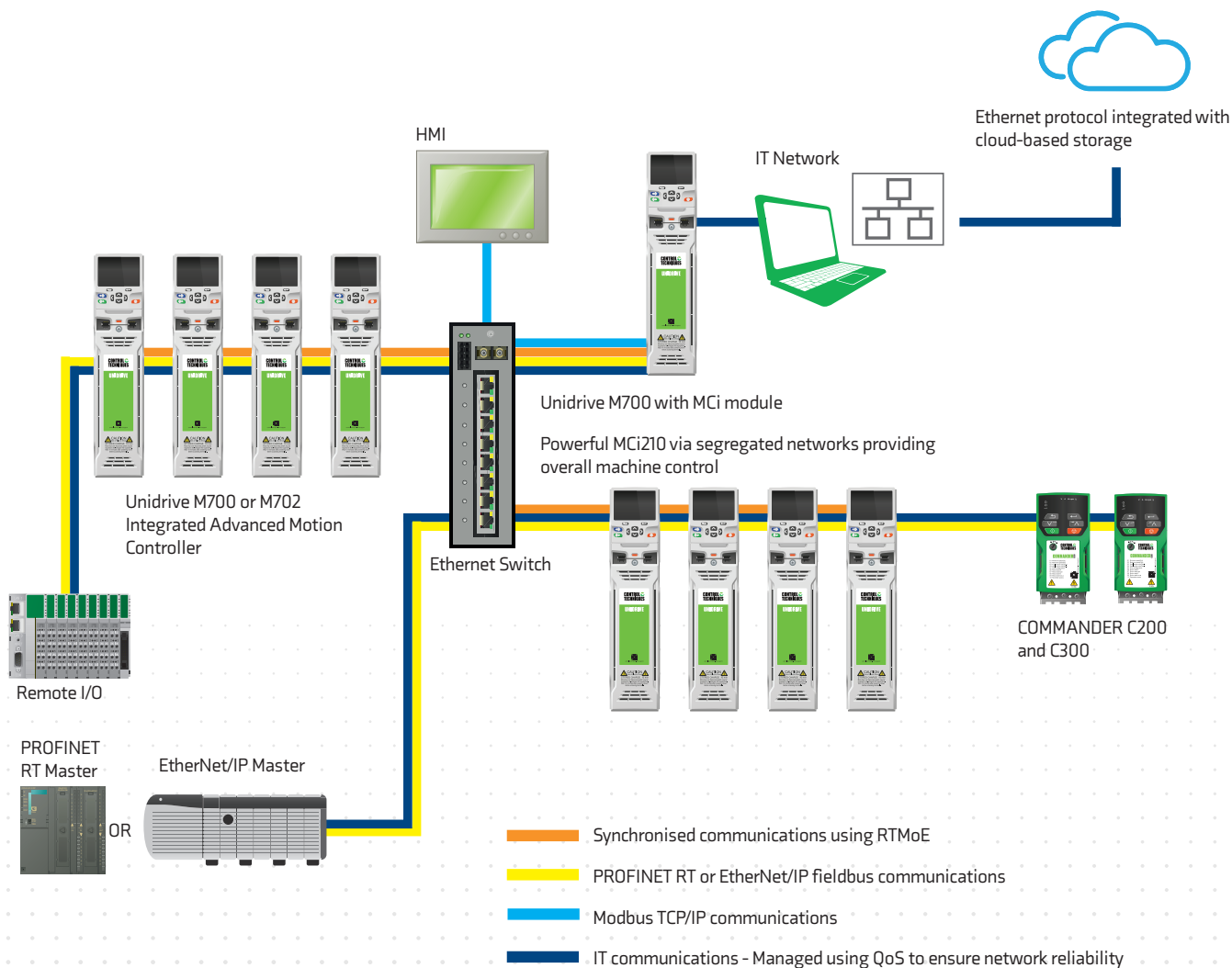
The new Unidrive M drives offer the following highlighted benefits:

- Complex topologies now possible using a single drive platform
- Achieve inter-axis synchronisation using RTMoE; available on the same network simultaneously with the higher level protocols
- PROFINET RT support with as low as to 1 ms cyclic link cycle times
- EtherNet/IP support with RPI as low as 2 ms
- Modbus TCP/IP support with up to 10 concurrent connections
- Commissioning and programming PC tools can be connected through the same Ethernet connection

## Flexibility of Communication

The Unidrive M drives' communications interface has been upgraded to bring even more performance and extend the range of supported applications and topologies. Using only the standard on-board communications it is possible to realise a system with an HMI connected via Modbus TCP/IP, simultaneously with a high performance connection to a central PLC using EtherNet/IP or PROFINET RT.

Additionally, inter-axis synchronisation using RTMoE delivers the ability to implement complex, highly accurate electronic line-shaft applications at a fraction of the cost of solutions available on the market today.



**Nidec**

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