



EDCi50

The EDCi50 from DOLI is a powerful and cost-effective controller designed for static and dynamic testing applications. It supports hydraulically, pneumatically, or electrically driven systems with a 10 kHz control loop and includes a ± 10 V drive output.

Three iSI extension slots are available for additional interface boards, supporting a wide range of sensors, actuators, and input/output channels.

The unit is housed in a robust cabinet and offers Ethernet connectivity, enabling reliable integration into automated test systems with network-based coordination and data handling. Remote control is supported via DOLI RMCi. The range of functions can be extended by integrating the optional DOLI DriveBox as an external drive interface.

Technical Specification / Data		
Dimension [mm]		200 x 190 x 67
Weight [g]		1700
Supply Voltage [V]	24V Power Plug (female)	24
Typ. Power Consumption [W]		30
Typ. Current [A]		1,25
Performance		
System and Data Acquisition Rate [kHz]		10
Test frequency [Hz]		500
Environmental Conditions		
Electromagnetic Compatibility (EMC)		IEC 61326-1:2012
RoHS Compliance		EN 50581
Communication Interfaces		
Universal digital I/O <small>24V / 100mA</small>	25-pin D-Sub Plug (female)	8 inputs 8 outputs
USB 2.0 full speed for PC Communication	USB Type B Plug	✓
USB host for USB sticks		✓
LAN 10/100 MBit	Ethernet Plug	✓
RS232/RS485 sensor interface ¹ <small>max 115,2 kBaud</small>	9-pin D-Sub Plug (female)	
Synchronization of multiple EDCi ¹		
Measurement Inputs / Interfaces		
Incremental / SSI input <small>Transducer ID via I2C + detection</small>	TTL (A/B/Ref, 8MHz, 5V) SSI (24V, 300MHz)	9-pin D-Sub Plug (female) ✓
Load Channel <small>Sensor detection + calibration via I2C, 10V with 24-bit resolution</small>		15-pin D-Sub Plug (male) ✓
Drive interface ¹ <small>adjustable 31.25kHz to 4MHz, Output ± 10V with 15-bit resolution</small>		44-pin D-Sub Plug (female)
External DriveBox ¹		
iSL extension Slots for <small>additional interface boards iSL modules</small>		3x
10V command output, current command output ¹ <small>for internal servo valve of DC power amplifier</small>		5-pin round DIN plug
Software		
Doli Installation Center		
DoliDoPE, Communication library for programmers		
Processor		
CPU VortexDX86, 800MHz		
¹ optional feature for this device		

www.doli.de

DOLI Elektronik GmbH
Rudolf-Diesel-Straße 3
72525 Münsingen
Telefon +49 7381 7673200

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