Efficiency, precision and dynamics in multi-axis systems



The i750 cabinet servo inverter provides everything for precise and dynamic motion control in complex multiaxis applications. Advanced safety functions and One Cable Technology reduce wiring and control complexity. Intelligent data-based functions and IIoT enable innovative motion control concepts.

As a single or double axis, the i750 cabinet with a matching supplier fits seamlessly into the Lenze automation system. The strengths of the inverter become apparent in numerous applications in combination with Lenze controllers and the FAST Application Software Toolbox. The scalable range of hardware, software, engineering services, and digital services supports the realization of integrated automation systems from the cloud to the drive shaft.

As a power extension of the i750 cabinet servo inverter in the range of 22 ... 110 kW, the i950 cabinet servo inverter can be used.

Highlights

- Integrated DC-bus connection in the power range 1.1 ... 15 kW
- Small overall width from 50 mm for the double axes
- Single axes capable of multiple overloads for peak currents between 5 and 64 A, double axes up to 32 A
- Integrated functional safety and One Cable Technology (OCT)
- Auto-tuning function for quick and easy controller adjustment

Lenze

Product information

i750 cabinet servo inverter

	i750 cabinet
Design/mounting	
	Mounting
Degree of protection	
	IP20 (NEMA 1)
Mains connection/power range	
3 AC 230 V	Single axis: 1.1 15 kW
3 AC 400 V 3 AC 480 V	Double axis: 1.1 7.5 kW DC supply range: 235 — 750 V (central mains connection via nower supply modules)
Market approvals	be supply range. 255 756 V (central mains connection via power supply modules)
Approval	CE, UKCA, UL, CSA
Environment	RoHS
Functions	
Motor control	Servo control for synchronous motors, servo control for asynchronous motors, V/f characteristic control for asynchronous motors (open loop)
Feedbacks	One Cable Technology (OCT)
	resolver, SinCoc/Hipperface/SCI/TTI
Properties	Cyclic synchronous position mode (csp)
	Cyclic synchronous velocity mode (csv)
	Cyclic synchronous torque mode (cst)
	Standardized and reusable software modules for important servo applications
	Small overall width from 50 mm for the double axis device.
Functional safety	Safe Torque Off (STO), functions for safe speed, direction of rotation, position and brake monitoring, among
	others.
Overload behavior	
· · · · · · · · · · · · · · · · · · ·	200% for 3s; 150% for 60s
Cooling	
	Ambient operating temperature: 3K3 (-10 +55 °C) EN IEC 60721-3-3 (derating of 2.5 %/°C above +45 °C)
Inputs/outputs	
Digital input/output	2/0
Analog input/output	-
NO/NC relay	-
Communication	
	EtherCAT

