

Servo Drive TS150 / TS350 - Series

Highest Dynamics Paired With Best Precision



With its 100kHz fast control loop, the TS series servo drives master even the most difficult motion problems: Highly dynamic positioning tasks or on the other hand very precise motion.

Together with the fast real-time bus *Tria-Link*, the drive can perform tight coupling of axes, without the need of an external motion controller.

State of the art DSP and FPGA technology allow for customized solutions.

Properties

- » 100kHz control loop
- » PID architecture with 5 filter blocks
- » 10kHz path planning
- » 100 μ s reaction time
- » Freely programmable, 10kHz task
- » Direct inter-drive coupling of axes
- » 10Arms nominal (20A peak); 4kW
- » Safe torque off, redundant
- » Compact dimensions

Applications

- » Direct drives for highest stiffness and precision
- » Parallel cinematic robots
- » High precision CNC
- » Spindles, also positionable
- » Portals



**Redefining
Motion
Control**

**Datasheet
TS15x
TS35x**

Technical Specifications

	Single Axis Types	Two Axes Types
	TS151	TS150
	TS351	TS350
Motor configuration	1x AC synchronous or 1x DC	2x DC
Voltage motor, rated	TS151: 150V TS351: 350V	TS150: 75V TS350: 150V
Supply, rated	TS151: 150VDC TS351: 350VDC	TS150: 150VDC TS350: 350VDC
Supply, min.-max.	TS151: 20 – 170VDC TS351: 20 – 370VDC	TS150: 20 – 170VDC TS350: 20 – 370VDC
Output current, rated	10Arms	10Arms (sum of both motors)
Output current, peak	20A	20A (sum of both motors)
Thermal Time-Constant	2s	2s
Output power, cont.	TS151: 2070W TS351: 4510W	TS150: Σ 2070W TS350: Σ 4510W
Position measurement: Digital	Pulse frequency 5MHz max., glitch- and FIR filtering; Standards: RS-422, EnDat 2.2; on request: BiSS	
Position measurement: Analog	Sin/Cos 1Vpp: 65536 times interpolation, auto calibration, 500kHz max. frequency, FIR filtering; Standards: EnDat 2.1 & 2.2; on request: Hiperface, BiSS	
Digital inputs	6 Inputs opt. isolated, 24V 10 μ s	
Digital outputs	2 Outputs opt. isolated, 24V, 1A	
Logic supply	24VDC \pm 15% @ 350mA max.	
Communication	Tria-Link 200Mbps, Host(PC) and inter drive communication	
Host (PC) connection	PCI-/PCI-express bus card TL100/TL300 (option)	
Programming inside the drive	Freely programmable in a 10kHz Real Time-Task in Microsoft® C#/C++/J#/VisualBasic, incl. Coupling of Axes; additional asynchronous task	
Programming PC side	TAM SDK for Microsoft .NET Framework; Beckhoff TwinCAT (opt. with CNC); Linux	
Dimensions	WxHxD: 49x200x130mm ³	

Subject to change without notice.

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