For current pricing, please see our website.

Two Piezo-Actuator

Open- and Closed-Loop

Feedback Connections

USB Plug-and-Play Connectivity

User Controlled Digital I/O Port

Output Channels

Operation

Strain Gauge

Features

CHAPTERS

Manual S	Stages
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- **Motorized Stages**
- Multi-Axis
- Platforms Actuators

Controllers

- **V**SECTIONS
- T-Cube Overview

 Benchtop

 Overview

 Rack System

 Overview

 DC Servo

 Stepper Motor

 Piezo/Strain

 Gauge

 Auto-Alignment

 Solenoid

apt Control Software

Tutorials

- Full Software GUI Control Suite
- ActiveX[®] Graphical Panel Controls

Modular Rack System Piezo Driver with Feedback

- ActiveX[®] Programming Interfaces
- Seamless Software Integration with aptTM Family



Modular aptTM Piezoelectric Controller

This modular aptTM piezoelectric controller, compatible with the aptTM rack (pages 624 - 625), incorporates the latest high-speed digital signal processing (DSP), low-noise analog electronics, and ActiveX[®] software technology to provide two low noise, fully software controlled, high-voltage (0-75 V) output channels. These modular controllers are designed for use in larger scale critical alignment applications where nanometer-level motion control is required. The modular aptTM piezo controller is supplied with a full suite of software support tools. An intuitive graphical instrument panel allows immediate control and visualization of the operation of the piezo controllers. See pages 654 - 656 for a full description of the aptTM system software, and the next page for details on the aptTM modular rack system that houses this module.

Travel Zero Enable	SN: 21000001: V1.0.12(1.0.5) Travel Zero Enable				
UR:45	Vots Position				
Open Loop Cosed Loop Jog Open Loop Cosed Loop Jog Step Size: 0.10 Input Source: +ve BNC (+ SW) Integral: 100 Integral: 100					
THOR LASS	C Active Settings				

See pages 654 - 656 for more information

Easily Configured Closed-Loop Operation

Module operation is fully configurable (parameterized) with key settings exposed through the associated graphical interface panel. Open-loop or closed-loop operating modes can be selected quickly. In both modes, the display can be changed to show drive voltage or position (in microns). In the closed-loop operation mode, both the P and I (proportional and integral) components of the feedback control loop can be altered to adjust the servo-loop response. Adjustment of all key parameters is possible through direct interaction with the graphical panel or through the ActiveX® programmable interfaces that are included with each instrument. This allows the user to build automated alignment routines in almost any programming language.

Software Developers Support CD

A developers' kit is shipped with all of our apt[™] Series controllers. This additional software is intended for use by software developers working on large system integration projects that incorporate apt[™] products. The kit contains an extensive selection of useful code samples as well as tutorial information.

Specifications

Piezoelectric Output:

- Two Output Channels:
- SMC Male Connector
- Voltage Output: 0 75 VDC/Channel
- Voltage Stability: 100 ppm Over 24 Hrs
- Noise: <3 mV_{RMS}
- Output Current (Max): 500 mA/Channel
- Differential Analog Inputs (BNC):
- 0 10 VDC
- Position Feedback
 - (9-Pin D-Type Connector) – Strain Gauge Feedback
 - Voltage Feedback: 0 10 VDC
- User Input/Output
- (26-Pin D-Type Connector):
- Two Output Monitors: 0 10 VDC
- Two Potentiometer Inputs:
 - 10-Turn Pots
- Trigger Input/Output: TTL
- Digital I/O Lines: Opto-Isolated
- General:
- One Slot aptTM Rack
 Dimensions (W x D x H): 7.5" x 10.6" x 1.97"
- (190 mm x 270 mm x 50 mm) • Weight: 3.3 lb (1.5 kg)





RS485 (0-5 V)

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See pages 624 - 625 for more information on the aptTM rack enclosure.

ITEM #	\$	£	€	RMB	DESCRIPTION
MPZ601	\$ 2,180.00	£ 1,569.60	€ 1.896,60	¥ 17,374.60	apt TM 2-Channel Piezoelectric Drive Module with Feedback