

**Aumictech**

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Data Sheet

August 15, 2026

BURLEIGH

Burleigh 7000-1-3 Inchworm Controller

Burleigh 7000-1-3 Inchworm Controller, Manages inchworm motor movement with programmable controls and safety features. Supports smooth, precise motion for nanometer-scale positioning tasks. Integrates with automation systems.



MODEL

Burleigh 7000-1-3

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

7000-1-3

LISTING

<https://aumictechlabs.com/products/7000-1-3-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Burleigh 7000-1-3 Inchworm Controller is a multi-axis motion control system that delivers nanometer-scale positioning across up to three independent or simultaneous axes. Built around sophisticated PZT drive electronics, it supports both open-loop and closed-loop operation with programmable controls optimized for high-speed, high-resolution motion in demanding scientific and industrial environments. Technical Specifications Axes of Operation: Up to three axes Control Mode: Open-loop or closed-loop Motion Resolution: Nanometer-scale positioning Motion Characteristics: High-speed operation with high resolution Drive Electronics: PZT drive electronics providing voltage, current, and timing for rapid actuation Weight: Approximately 15 lbs Key Features Programmable controls for inchworm motor movement Manual control via handset or joystick Remote control via TTL signals or RS-232 protocols Encoder counting circuitry for closed-loop systems Closed-loop capabilities include step size configuration, position display, zero-point setting, and position maintenance Integrated programmable safety features

Compatibility & Integration The controller is designed specifically for Burleigh Inchworm Motors and integrates with motors equipped with integral shaft encoders, TSE Series Integral Encoder Stages, or external position-measuring devices using TTL quadrature signals. When purchased as a full system, compatible interface units such as Heidenhain EXE 702B and EXE 702-401 Encoder Interface Units are available with associated cables. Optional accessories include the Burleigh 7003 Joystick for enhanced manual control.

70001 Characteristics / Specifications

PARAMETER	VALUE
Model Family	Burleigh 6100
Instrument Type	Inchworm motion controller
Axis Options	1 2 or 3 axes
Motor Type	Inchworm piezoelectric
Control Mode	closed loop class
Accessory Handset	Burleigh 6005
Accessory Joystick	Burleigh 6003
Related Series	6200 and 7000 controllers
Form Factor	benchtop controller
Interface	front panel plus remote accessories
Operating Temperature Class	0 C to 40 C
Line Power	100/120/220/240 V class
Position Resolution Class	nanometer Inchworm class
Travel Range	stage dependent
Vacuum Compatible Stages	supported with Inchworm
Manufacturer	Burleigh
Use Case	precision optical alignment
Drive Channels	one per axis
Status Display	axis position and fault
Emergency Stop	front panel disable
Cable Interface	Burleigh Inchworm motor cables
Storage Temperature Class	minus 20 C to 60 C class
Storage temperature	Class: minus 20 C to 60 C class
Operating temperature	Class: 0 C to 40 C

70001 Specifications

PARAMETER	VALUE
Burleigh 6100 Series Inchworm Controller	Overview
Applications	Nanometer-class optical alignment, vacuum chamber positioning, and multi-axis Inchworm stage control.
Key Features	1 2 or 3 axis configurations
Technical Specifications	Model Family: Burleigh 6100

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 20 C to 60 C class
Operating temperature	Class: 0 C to 40 C
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Position Resolution Class	nanometer Inchworm class
Travel Range	stage dependent
Vacuum Compatible Stages	supported with Inchworm
Manufacturer	Burleigh
Use Case	precision optical alignment
Drive Channels	one per axis
Status Display	axis position and fault
Emergency Stop	front panel disable
Cable Interface	Burleigh Inchworm motor cables
Storage Temperature Class	minus 20 C to 60 C class Notes Axis options and accessory models from Burleigh 6100/6200/7000 Inchworm controller catalog descriptions. Exact force/speed limits are stage-model specific.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.