

**Aumictech**

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Data Sheet

August 15, 2026

BURLEIGH

Burleigh 7000-1-1 Inchworm Controller

The Burleigh 7000-1 Inchworm Controller provides precise control for Inchworm motors. It offers stable and reliable performance, ensuring accurate positioning for demanding applications.



MODEL

Burleigh 7000-1

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

7000-1

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Burleigh 7000-1-1 Inchworm Controller is a precision motion control instrument engineered to drive and command Inchworm motors with high resolution and speed. It delivers sophisticated PZT drive electronics that generate the precise voltage, current, and timing required for rapid, accurate actuation of piezoelectric motor elements. The controller operates up to three axes independently or simultaneously, supporting both open-loop and closed-loop positioning modes to meet diverse application requirements. Technical Specifications Axis Capability: Up to three axes Operation Modes: Open-loop and closed-loop Open-Loop Control: Motor actuation without integrated feedback; compatible with handset, joystick, or TTL signal interfaces for applications where position measurement is external or manual Closed-Loop Control: Integrated encoder counting circuitry enabling step size setting, position display, zero point setting, targeted position movement, and position maintenance Performance: High-speed operation with high-resolution positioning Drive Electronics: Sophisticated PZT drive electronics for precise motor actuation Programmability: Flexible configuration and operation programming Key Features Manual control

via handset or joystick interfaces Remote operation using TTL signals or RS-232 protocols Bi-directional communication available in some configurations for enhanced external control Compatible with industry-standard computer interfaces including RS-232 and ISA PC card connections Typical Applications Demanding scientific and industrial applications requiring stable, reliable precision positioning with high resolution and repeatable movement control. Compatibility & Integration The 7000-1-1 interfaces with Burleigh Inchworm motor systems and supports control peripherals such as handsets and joysticks. Computer integration is achieved through RS-232 protocols or dedicated ISA PC card interfaces for multi-axis, multi-motor coordination.

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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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 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

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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.