

**Aumictech**

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Data Sheet

August 15, 2026

DATA DEVICE CORP

Data Device Corp HSR-203

Key Features 0.005 degree accuracy 0.001 degree resolution Type II servo loop with no hangup at 180 degrees Automatic gain ranging 47 Hz to 1000 Hz Local or remote TTL control plus optional GPIB Fault and ambiguity indicators Technical Specifications Model: HSR-203 Also Known As: HSR203 Instrument Type: synchro and resolver angle indicator Accuracy: plus or minus 0.005 degree Resolution: plus or minus 0.001 degree Sr203 Accuracy: plus or minus 0.03 degree Sr203 Resolution: plus or minus 0.01 degree Tracking Loop: Type II continuous tracking Phase Shift Tolerance: plus or minus 50 degree max signal to reference Frequency Coverage: 47 Hz to 1000 Hz wideband Gain Ranging: automatic Display Unipolar: 0 to 360 degrees Display Bipolar: plus or minus 180 degrees Chassis Height: 3.



MODEL

**Data Device Corp
HSR-203**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

HSR-203

LISTING

<https://aumictechlabs.com/products/hsr-203-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Data Device Corp HSR-203 is a high-precision synchro and resolver angle indicator that converts synchro or resolver inputs into BCD angular data with real-time front panel display. Engineered for demanding test, control, and computation environments, the HSR-203 delivers $\pm 0.005^\circ$ accuracy and $\pm 0.001^\circ$ resolution across a broadband 47 Hz to 1000 Hz frequency range. The instrument features a Type II servo loop for continuous tracking with no velocity lag and eliminates 180° hangup errors. Its drift-free performance requires no warm-up, adjustments, or

recalibration over the instrument's lifetime. Technical Specifications Accuracy: $\pm 0.005^\circ$ Resolution: $\pm 0.001^\circ$ Frequency Bandwidth: 47 Hz to 1000 Hz Input Signal Compatibility: Wide range of voltages and frequencies without programming Maximum Signal to Reference Phase Shift: $\pm 50^\circ$ Display Format: Selectable unipolar (0–359.999°) or bipolar (0 to +179.999°) Servo Loop: Type II with no velocity lag and no 180° hangup Input Channels: One front panel, two rear panel Output: BCD angular data Logic Levels: TTL compatible Dimensions: 3.5 inches high, 1/2 rack space width Key Features Built-in Test (BITE) circuit detects over-velocity and internal malfunctions Display Ambiguity Indicator shows when output data is changing Fault Indicator signals loss of tracking Phase Shift Compensation accommodates $\pm 50^\circ$ signal-to-reference deviation Selectable input type (synchro or resolver) and bandwidth from front panel or rear connector Unipolar/bipolar output selection Lamp test and inhibit functions Optional IEEE-488 GPIB interface (HSR203-488 variant) Typical Applications Bench testing of synchro and resolver equipment Real-time angular measurement in control systems Precision angle indication in computation systems High-reliability test environments requiring zero drift Compatibility & Integration Three mounting configurations are available: portable with carrying handle, half-rack with brackets, or center-mounted in a 19" rack. All instruments include Amphenol 17-10500-1 mating connector and Belden 17250 detachable line cord. Remote control logic interfaces through rear connectors. Optional synthesized reference and automatic gain ranging are available in selected configurations.

HSR203 Characteristics / Specifications

PARAMETER	VALUE
Model	HSR-203
Also Known As	HSR203
Instrument Type	synchro and resolver angle indicator
Accuracy	plus or minus 0.005 degree
Resolution	plus or minus 0.001 degree
Sr203 Accuracy	plus or minus 0.03 degree
Sr203 Resolution	plus or minus 0.01 degree
Tracking Loop	Type II continuous tracking
Phase Shift Tolerance	plus or minus 50 degree max signal to reference
Frequency Coverage	47 Hz to 1000 Hz wideband
Gain Ranging	automatic
Display Unipolar	0 to 360 degrees
Display Bipolar	plus or minus 180 degrees
Chassis Height	3.5 in
Chassis Width	1/2 rack
Inputs	front panel channel plus two rear connector channels
Output Format	BCD angle
Logic	TTL compatible
Remote Bus Option	IEEE-488
Controls	channel select input type bandwidth unipolar bipolar lamp test inhibit
Local Remote	single switch multiplex
Fault Indicator	shows when not tracking
Ambiguity Indicator	shows when output data is changing
Calibration	no adjustments or calibrations required
Manufacturer	Data Device Corporation

PARAMETER	VALUE
Related Simulator	SIM-31200 series
Bandwidth	unipolar bipolar lamp test inhibit

HSR203 Specifications

PARAMETER	VALUE
Key Features	0.005 degree accuracy 0.001 degree resolution
Type II servo loop with no hangup at 180 degrees	Automatic gain ranging 47 Hz to 1000 Hz
Technical Specifications	Model: HSR-203

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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PARAMETER	VALUE
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Related Simulator	SIM-31200 series
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Notes

From DDC SR-203 / HSR-203 synchro and resolver angle indicator literature. HSR-203 is the high-accuracy member; SR-203 accuracy/resolution rows are listed only to identify the sibling, not as HSR-203 limits.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.