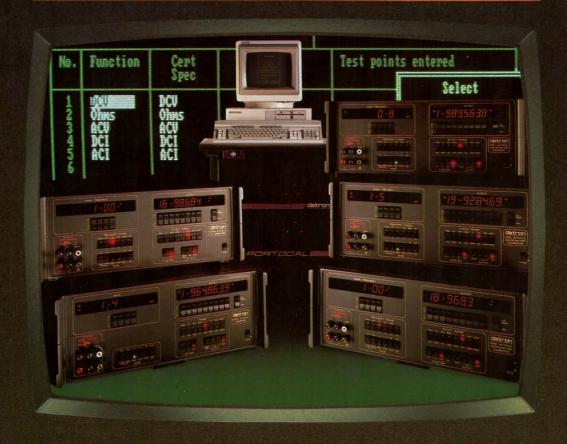


# RANGE OF CALIBRATORS



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### THE WORLD'S FINEST RANGE OF PROGRAM MABLE CALIBRATORS

The Datron Instruments Autocal family of calibrators and automated calibration systems leads the world in innovative calibration technology, providing an unparalleled choice of functional capability and performance. Together with Datron's calibration software, controllers and accessories, the Autocal range offers a selection of high quality instruments and systems with a variety of different specifications and costs. From this range, the optimum solutions can be found to most Digital Multimeter (DMM) calibration, DC to Low Frequency Standards, and high-accuracy system-source applications.

Datron calibrator performances vary from the Standards Laboratory accuracy of a multifunction calibrator capable of calibrating today's highly accurate  $7\frac{1}{2}$  &  $8\frac{1}{2}$  digit DMMs, to one similar in appearance and functionality, but with a performance and price which is ideally suited for handheld and  $3\frac{1}{2}$  &  $4\frac{1}{2}$  digit DMM calibration requirements. Functionally, the number of options within the complete calibrator range is virtually limitless,

varying from dedicated DCV-only or ACV-only units, suitable for standards laboratory or systems use, to calibrators which are fully multifunctional: single instruments with all the flexibility of functions and the breadth of range in both amplitude and frequency to fulfil the ever more stringent demands of the modern calibration facility. Practical and straightforward to use on the bench, all Datron Autocal calibrators are fully programmable via the IEEE-488 interface, making them perfect sources for automated calibration systems. In addition, the wide temperature tolerance of these instruments extends their usefulness to many A.T.E. or systems applications outside the calibration laboratory, on the production floor or in the factory test bay. Datron Calibration Software is available to enhance these features, offering a range of fully integrated, menu driven, automated multimeter calibration systems either for use in traditional calibration environments, or for more demanding mobile calibration roles.

MODEL NUMBER	BASIC FUNCTIONS	OPTIONAL FUNCTIONS	DISPLAY RESOLUTION	RANGES	BASIC 90 DAY ACCURACY ±(ppmR+ppmFS) 23°C±1°C	FREQUENCY SPAN	COMMENTS
4707	DCV,ACV (to 200V) IEEE-488	1000V DC & AC range DCI,ACI,Ω	7½/6½ digits	DCV: 100μV-1000V ACV: 1mV-1000V DCI: 100μA-1A ACI: 100μA-1A Ω: 10Ω-100MΩ	2 + 0.25 70 + 10 20 + 5 220 + 50 3	10Hz-1MHz 10Hz-5kHz	For the calibration of DMMs up to high accuracy 8½ digit models.
4700	DCV,ACV (to 200V) IEEE-488	1000V DC & AC range DCI,ACI,Ω	$7_2^1/6_2^1$ digits	DCV: 100μV-1000V ACV: 1mV-1000V DCI: 100μA-1A ACI: 100μA-1A Ω: 10Ω-100MΩ	4 + 0.5 120 + 20 40 + 7 220 + 80 6	10Hz-1MHz 10Hz-5kHz	For the calibration of DMMs up to medium performance 6½ digit models.
4705	DCV, ACV, DCI, ACI,Ω IEEE-488		6½/5½ digits	DCV: 100μV-1000V ACV: 1mV-1000V DCI: 100μA-1A ACI: 100μA-1A Ω: 10Ω-100MΩ	15 + 1 250 + 50 50 + 15 220 + 80 6	10Hz-100kHz 10Hz-5kHz	For the calibration of DMMs up to 5½ digit models.
4000A	DCV IEEE-488	DCI,Ω	$7_2^1/6_2^1$ digits	DCV: 100μV-1000V DCI: 100μA-1A Ω: 1Ω-10MΩ	2 + 0.25 20 + 5 3		For the calibration of DMMs up to high accuracy 8½ digit models.
4000	DCV IEEE-488	DCI,Ω	$7_2^1/6_2^1$ digits	DCV: 100μV-1000V DCI: 100μA-1A Ω: 1Ω-10MΩ	3 + 0.5 20 + 5 3		For the calibration of DMMs up to high accuracy 8½ digit models.
4200A	ACV (to 200V) IEEE-488	1 000V range ACI	6½ digits	ACV: 1mV-1000V ACI: 100μA-1A	40 120	10Hz-1MHz 10Hz-5kHz	For the calibration of high accuracy AC DMMs. Spot Frequency. 4101B Compatible.
4100	DCV, ACV, DCI, ACI,Ω IEEE-488	Range of Automated Multimeter Calibration Systems using any Datron Autocal Calibrators. Includes 4101B menu-driven software – compatible with IBM-XT, HP Vectra, and Compaq controllers.					



DISPLAY FOR FREQUENCY, ERROR, OFFSET AND SPEC. MODES.

FULL FRONT PANEL CALIBRATION WITH AUTOCAL.

FREQUENCY RANGE SELECTION WITH AUTORANGE SWEEP FACILITY.
5 FREQUENCIES CAN BE STORED AND RECALLED.

### THE AUTOCAL RANGE OF CALIBRATORS

UP/DOWN KEYS ADJUST OUTPUT SETTING WITH EITHER ONE-STEP OR RAPID 'ROLLING' CONTROL.

HIGH BRIGHTNESS PLASMA DISPLAY WITH FLOATING DECIMAL POINT, COMMAS AND FULL ANNUNCIATION FOR EASE OF READING.

UP/DOWN KEYS
ADJUST FREQUENCY
SETTING OR ADJUST
OUTPUT IN ERROR
AND OFFSET MODES.

FULLY FLOATING AND GUARDED OUTPUT, GUARD-GROUND 650V RMS. (2.5kV FLASH TEST).

LOW THERMAL SAFETY OUTPUT TERMINALS OF GOLD PLATED COPPER. OPTIONAL REAR FITTING.

SELECTION OF LOCAL OR REMOTE GUARD.

CHOICE OF 2 OR 4 WIRE SENSE.

INSTANT READ-OUT OF LIMITS OF UNCERTAINTY TAKING ACCOUNT OF FUNCTION, RANGE, SETTING AND FULL SCALE. PERIOD SINCE CALIBRATION SET ON REAR PANEL. DISPLAYS IN ppm, % OR ABSOLUTE VALUE. ERROR DEVIATION WITH ± 10% ADJUSTMENT FOR DIRECT DISPLAY OF ACCURACY OF UNIT BEING CALIBRATED.

OFFSET DEVIATION OF UP TO 2% OF RANGE ADJUSTS FOR ZERO OFFSET OF THE UNIT BEING CALIBRATED.

OPERATING INSTRUCTIONS ON A PULL-OUT CARD.

SELF-TEST DIAGNOSTICS WITH DISPLAYED ERROR CODES.

FUNCTION SELECTION.

RESET TO NORMAL OPERATION FOLLOWING EXTERNAL OVERLOAD.

SELECTS FULL RANGE OUTPUT FOR WHATEVER RANGE IS SELECTED.

SELECTS ZERO OUTPUT.

8 RANGE KEYS ALLOW SIMPLE, DIRECT, DECADE SELECTION.

LINE VOLTAGE SELECTABLE ON REAR PANEL.

OUTPUT OFF
DISCONNECTS OUTPUT FROM TERMINALS.



MODE / FREQUENCY



OUTPUT ON APPLIES SELECTED OUTPUT TO TERMINALS. ABOVE 110V (DC) OR 75V(AC), LED FLASHES AND AUDIO WARNING SIGNAL SOUNDS.



## THE DATRON CALIBRATION & MEASUREMENT RANGE

atron Instruments leads the world in the design and manufacture of programmable calibrators, automated calibration systems and digital multimeters.

Complementing the Datron Instruments range, other divisions within the Group are also engaged in the production of some of the world's finest test instruments.

To assist you, data sheets are available with more detailed product information and full specifications. Contact us now and we will be pleased to send you the information you require.

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YOUR LOCAL AGENT/REPRESENTATIVE