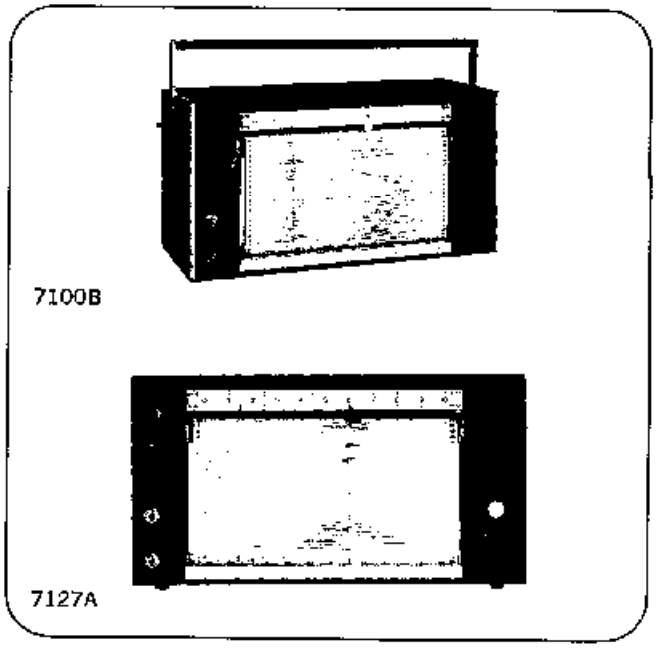
STRIP CHART RECORDERS

10" PLUG-IN RECORDERS

Ink or electric writing

Models 7100B, 7101B, 7127A, 7128A



The 10" strip chart recorders can be used in a wide range of laboratory and industrial applications. They feature high performance, low cost, and solid state construction for reliability, compactness, and light weight. Models 7100B and 7128A have two independent servo pen drives and require two input modules. The 7101B and 7127A are single pen units and take one input module. Ordering information should specify basic frame and exact input module or modules required.

Each main frame is equipped with instantly selected chart speeds (4 for 7127A, 7128A; 12 for 7100B, 7101B) and a modular chart magazine. The chart magazine will swing out at a 10° or 30° angle for convenient note writing. An optional integrator for simultaneously and accurately computing the area under the chart curve is also available.

Specifications

Recording mechanism

Ink: servo actuated ink pen drive.

Electric: similar to ink mechanism except a stylus, electrosensitive paper and the associated electronics are furnished in place of the ink pen.

Response time: maximum 0.5 s (50 Hz operation 0.6 s).

Chart capacity: (ink writing) 120' chart rolls, 11" wide with 10" (250 mm) calibrated writing width. (Electric writing) 100' chart rolls, 11" wide with 10" (250 mm) calibrated writing width.

Chart speeds

7100B/7101B (English)—1, 2 in/hr; 0.1, 0.2, 0.5, 1, 2 in/min; 0.1, 0.2, 0.5, 1, 2 in/s.
7100BM/7101BM (Metric) 2.5, 5, 15, 30 cm/hr; 1.25, 2.5, 5, 15, 30 cm/min; 1.25, 2.5, 5 cm/s.
7127A/7128A (English)—¼, ½, 1, 2 in/min.
HO1-7127A/HO1-7128A—6, 12, 24, 48 in/hr.
HO2-7127A/HO2-7128A—1½, 3, 6, 12 in/hr.

Power: 115 or 230 V ±10%, 60 Hz, 65 VA for 7100B and 7128A. 42 VA for Models 7101B and 7127A. 115 or 230 V, 50 Hz models available as an option.

Dimensions

7100B/7101B series (cabinet): 11-31/32" (304 mm) high, 17½" (445 mm) wide, 8¼" (210 mm) deep.
7100BR/7101BR (rack): 8-23/32" (222 mm) high, 19" (483 mm) wide, 8¼" (210 mm) deep.
7127A/7128A series: (cabinet) 9-3/32" (231 mm) high, 16¾" (425 mm) wide, 8¼" (210 mm) deep; (rack; brackets supplied) 8-23/32" (222 mm) high, 19" (483 mm wide, 8¼" (210 mm) deep.

Weight

7100B series: net 28 lbs (12,7 kg); shipping 39 lbs (17,7 kg).
7101B series: net 28 lbs (12,7 kg); shipping 33 lbs (17,3 kg).
7127A series: net 25 lbs (11,4 kg); shipping 35 lbs (15,9 kg).
7128A series: net 28 lbs (12,7 kg); shipping 38 lbs (17,3 kg).

Prices

Dual channel:

7100B/BR (English), 7100BM/BMR (metric)	$1500
7128A/HO1-7128A/HO2-7128A (English only)	$1150

Single channel:

7101B/BR (English), 7101BM/BMR (metric)	$1000
7127A/HO1-7127A/HO2-7128A (English only)	$ 850

Options:

7100B 7101B	7127A 7128A	Description	Additional Price 7100B 7101B	Additional Price 7127A 7128A
02	—	10 to 1 remote speed reducer	$85	—
04	14	5k retransmitting potentiometer (channel 1)	50	$50
05	01	High-low limit switches (channel 1)	50	50
06	08	Remote control of electric pen lift	50	50
07	02	Remote on-off chart control	25	25
10	03	50 Hz operation	N/C	N/C
11	13	Locking glass door	50	50
12	04	Event marker (ink) left side	35	35
14	06	Event markers (ink) both sides	70	70
15	07	Integrator (7127A, 7101B series or channel 2 of 7128A, 7100B series)	685	685
16	15	5k retransmitting potentiometer (channel 2)	50	50
17	09	High low limit switches (channel 2)	50	50
18	10	High-low limit switches (both channels)	100	100
19	17	Electric writing	75	75
20	20	Scale with "0" right side	N/C	N/C
21	21	Gray control panel	N/C	N/C
22	22	Event marker (elec) left side	35	35
23	23	Event markers (elec) both sides	70	70
24	24	Disposable pen tips (servo pens only)	N/C	N/C
25	25	Soft zero right side	N/C	N/C
—	11	Carrying handle	supplied	25
—	16	Retransmitting potentiometer (both channels)	—	100

NOTE: 7100B, 7101B

Option 15 is not compatible with options 14, 16, 19, 22, or 23.
Options 15, 19, and 25 require special paper.

7127A, 7128A

Options 06, 15, 16, 17, 22, or 23 cannot be installed when instrument is equipped with Option 07.
Options 07, 17, and 25 require special paper.
Electric and ink writing systems are not compatible. Event markers must be of same type as the main writing system.

PLUG-IN MODULES
For the Model 7100B, 7101B, 7127A, and 7128A

17500A/17501A Multiple Span Input Modules

The Models 17500A (5 mV full scale) and 17501A (1 mV full scale) Multiple Span plug-ins offer high input resistance and a continuously variable span control. The inputs are floating up to 500 V above ground, have high common mode rejection and an input impedance of one megohm at null on all calibrated spans.

Specifications

Voltage spans: 17500A: 5, 10, 50, 100, 500 mV; 1, 5, 10, 50, 100 V full scale. 17501A: 1, 2, 5, 10, 20, 50, 100, 200 mV; 0.5, 1, 2, 5, 10, 20, 50, 100 V full scale.
Accuracy: ±0.2% of full scale.
Linearity: terminal based: 0.1% of full scale.
Resettability: 0.1% of full scale.
Input resistance: 1 megohm at null on all fixed calibrated and variable spans except 100,000 ohms in the variable mode on the four most sensitive spans on the 17500A only. Potentiometric operation is available to the 17500A on the four most sensitive spans and to the 17501A on the six most sensitive spans by the removal of an internal buss wire.
Interference rejection: dc common mode; 120 dB on the four most sensitive spans of the 17500A and the three most sensitive spans of the 17501A: line frequency, 100 dB on the four most sensitive spans of the 17500A and the three most sensitive spans of the 17501A.
Zero-set: adjusrable full scale, plus one full scale of suppression
Maximum source impedance: up to 10 k ohm source impedance will not alter the recorder's performance on the four most sensitive spans of the 17500A and the six most sensitive of the 17501A. No source impedance restrictions on spans above 100 mV full scale.
Reference supply: Zener diode controlled.
Weight: 2 lbs (0,9 kg) net, 5 lbs (2,2 kg) gross.
Price

Model 17500A	$250
Model 17501A	$350

Options

01:	Five scale zero suppression (17501A only)	$ 50
02:	Calibrated for 8" travel (full scale)	N/C
04:	Gray control panel	N/C

17502A Temperature Input Module

The Model 17502A Temperature Measuring Input Module has a single span selectable to match almost any commonly used thermocouple. A wide variety of ranges are available. Thermocouple reference corrections for changes in ambient temperature are made within the module thus eliminating requirements for a remote compensation junction. The non-linear thermocouple output is converted within the module to a linear function of temperature which allows the use of standard ruled graph paper.

Specifications

Voltage spans: single span to match cold-junction thermocouples of types and ranges as listed on the data sheet.
Accuracy: ±0.5% or ±1°C (whichever is greater), refer to NBS CIR 561, dated 1955.
Input resistance: potentiometric.
Reference supply: Zener diode controlled.
Interference rejection: dc common mode, 120 dB; line frequency, 100 dB.
Weight: 4 lbs (1,8 kg) net, 7 lbs (3,2 kg) gross.

Price: Model 17502A	$250.
Option 04: gray control panel	N/C

17503A/17504A Single Span Input Modules

The Model 17503A plug-in, designed specifically for use with gas chromatography systems, is equipped with a single span of one millivolt full scale and potentiometric input. The Model 17504 plug-in may be ordered with any single span from a range of 5 mV to 100 V full scale. Potentiometric input is available, on the four most sensitive range cards, by removing an internal buss wire in the 17504A. The inputs of the 17503A/17504A can be floated up to 500 volts above ground and have a high common mode rejection. The zero may be positioned full scale or suppressed up to one full scale.

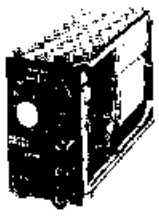
Specifications

Voltage spans: 17503A: 1 mV full scale. 17504A: 10 range cards available, which allow any span from 5 mV to 100 V full scale. (See data sheet.)
Accuracy: ±0.2% of full scale.
Linearity: terminal based: 0.1% of full scale.
Dead band: 0.1% of full scale.
Input resistance: 17503A: potentiometric. 17504A: one megohm at null.
Interference rejection: (17503A) dc common mode, 120 dB, line frequency common mode, 100 dB. Normal mode, greater than 60 dB at line frequency. (17504A) dc common mode, 120 dB on four most sensitive range cards; ac (line freq.) common mode, 100 dB on four most sensitive range cards. Normal mode greater than 60 dB at line frequency.
Zero-set: continuously adjustable over full scale, plus one full scale of zero suppression.
Maximum source impedance: up to 5 k ohm with the 17503A and 10 k ohm on the 17504A will not alert the recorder's performance.
Frequency: 60 Hz (line frequency) 50 Hz operation optional.
Weight: 2 lbs (0,9 kg) net, 5 lbs (2,2 kg) gross.
Price

Model 17503A	$250
Model 17504 (with one specified range card)	$200
Additional range cards	$ 25

Option:

17503A	17504A	Description	
01	–	Detector selector switch	N/C
02	01	50 Hz operation	N/C
03	–	1 mV (for 8" travel) for use with integrator	N/C
04	04	Gray control panel	N/C


17500A

17501A

17502A

17503A

17504A