



Chart Recorders, Paper and Pens

Price List, January 1, 2008 (Replaces List of June 1, 2005)

2800 Series Ordering Information

Select optional features such as temperature modules or special enclosures from the selections below and add the appropriate suffix to the recorder model number.

Model 2801-V	1 pen, single range: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N 928101.....	\$1470.
Model 2802-V	2 pens, single range: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N928201.....	\$1825.
Model 2803-V	3 pens, single range: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N928301.....	\$2155.
Model 2831	1 pen, 7 ranges: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N 928103.....	\$1655.
Model 2832	2 pens, 7 ranges: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N 928203.....	\$2045.
Model 2833	3 pens, 7 ranges: Volts, mA, or temperature; 1, 2, or 12 chart speeds.	P/N 928303.....	\$2495.

Side By Side Grids 2 and 3 pen recorders can be ordered with full 10 inch travel for all pens or with side by side grids at no extra charge. 2 pen recorders can have 2 grids of 5 inches wide or a full 10 inch wide grid. 3 pen recorders may have 3 grids of 3 inches wide, or full 10 inch travel for all pens. Side by side grids are useful in certain applications such as wind speed and direction and can be specified for no additional charge by adding an "SS" suffix to the model number.

Discontinued Recorder Products!

Pens and Chart Paper Still Available for All Discontinued Models, 221 and 222, 310 and 312, 2900

Optional Features for 2800 Series Recorders

AC-1	Alarm Contact (2800 Series). On/off set point, adjust over entire range from front panel (p/n 805200).....	\$85.	J T/C (p/n 811667); K T/C (p/n 811666) T,R,S,E T/C or PT-100 RTD.....	\$490.	
DD	Digital Display. 3 1/2 Digit LCD Meter can display temperature or other parameters such as %RH, KVA, etc. (p/n V108071).....	\$80. per channel	N-4	Dust & splash proof NEMA type enclosure (p/n 801626).....	\$725.
DP-1	Continuous trace event pen; single direction pulses (p/n 801442).....	\$90.	P-1	230V/50Hz power operation.....	\$6.
DP-2	Continuous trace event pen; bi-direction pulses to either left or right (p/n 801442).....	\$110.	12-V	12 Volt DC power for any recorder with 12 speed chart drive (p/n 801444).....	\$135.
ES	Analog trace spike event marker (2900 Series). Draws 1/2 inch spike on pen trace at contact closure (p/n 80841).....	\$60.	PD	Hinged plastic door with catch (p/n 801689).....	\$80.
ET	External trigger chart drive advance. Requires 5 volt pulses from 0-80 pulses per sec. (p/n 802033)...	\$160.	R	Reverse polarity right hand zero (left hand zero standard).....	no charge
GD	Gasketed door with window (p/n 805031).....	\$195.	RC	Remote ON/OFF control of chart drive (p/n 801617).....	\$40.
J T/C	Temperature Module includes linearization, cold junction compensation, and T/C break protection		SC	Special scales, one time charge for art.....	\$75.
K T/C	Select any standard range and specify degrees C or F.....	\$115.	SS	Side by side grids for 2 or 3 pen recorders.....	no charge
			Z	Front panel zero check push button. Shorts input to facilitate zeroing (p/n 112096)..	\$48. per channel.

Standard Chart Paper and Pens for 2800 & 2900 Recorder, 100 ft. rolls (delivery from stock)

1 to 24 rolls.....\$17.00 each 25 or more rolls.....\$13.00 each

414103 Single grid with alternating scales 0 - 100 & 100 - 0

Round Body Pens for 2801 and 2802 recorders
Packs of 5 Pens.....\$13.85 per pack

Round body pens below are used on all 1 & 2 pen recorders and 3 pen side by side recorders
Blue, P/N 412001 Red, P/N 412002 Black, P/N 412003
Green. P/N 412004

Rectangular Body Pens for 2900 and 2803 Recorders

Packs of 5 Pens.....\$14.00 per pack
Blue, rectangular body, short nib.....P/N 412025
Red, rectangular body, medium nib.....P/N 412026
Black, rectangular body, long nib.....P/N 412027

Order by Model number followed by option codes. For example, a one pen 2800 Series recorder with a gasketed door, alarm contact and an audible alarm would be ordered as a Model 2831-GD-AC-1-SA. Add the option prices to the recorder price for total cost (\$1655. + \$195. + \$85. + \$135. = \$2070. total cost.)

Optional & Time Stamped Chart Papers, 100 ft. rolls (stock to 6 wks. del.) Minimum order 25 rolls
 25 to 99 rolls.....\$22.00 each 100 or more rolls.....\$18.00 each

Single Grid 10" Wide (250 mm)

414030	0° to 800° J T/C non linear	414055	Dual grids; 0-360-180	414166	0 to 12 linear
414032	0° to 1600° J T/C non lin.		and 0-100 mph/knots	414189	0 to 300 KV
414033	0° to 2000° J T/C non lin.	414107	10 ⁻³ to 10 ⁻⁵ Torr, 2 log	414194	1300° to 2500°F linear
414044	10 to 0 to 100, live zero		decades	414195	5-30 to 90 MV and
414054	Same as 414103 except	414111	5 decades log paper		0 to 120 MW
	time lines every 1 cm apart	414136	0° - 1400° K T/C non lin.	414198	0° to 2200°F K T/C linear
				414204	0 to 6000 PSI linear

Dual Side By Side Grids; Each Approximately 4 3/4" Wide (120 mm)

414021	0° to 360° to 120 and 0 to 120	414055	0° to 360° to 180 and 0 to 100	414134	0° to 360° to 180 and 0 to 50
414046	Both grids 0 to 100	414074	Both grids .004 to 0 to .004 inches	414178	Both grids -40 to +60 linear

3 Side By Side Grids; Each Grid Approximately 2 3/4" Wide (76 mm)

414058	All 3 grids 0 to 100 and 100 to 0	414148	All 3 grids 0 to 600
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Obsolete Chart Paper, Available only on special order with payment at time of order. Minimum quantity 25 each 100 ft. rolls. (10 to 12 Weeks Delivery) 25 to 99 rolls \$22.00 ea. 100 or more rolls \$18.00 ea.

Single Grid 10" Wide (250 mm)

414031	0° to 1200° J T/C non lin.	414174	50 to 150 linear	414189	0 to 300 KV
414040	Blank paper, no grid	414175	55 to 65 Hz perforated	414191	2 grids 50° to 250°F for overlapping pens
414043	0 to 30% CO and CO ₂ one linear grid; alternating scales	414179	0 - 100% RH, -100° - 200° F	414192	1500° to 2500°F linear
414056	Dual grids, both 0-100	414180	1500° to 2200°F K T/C	414196	0 - 400 A, 0 - 150 V
414126	0 to 360 degrees	414181	-150 to +250 linear	414197	55 to 65 Hz
414137	-400° - +100° T T/C non lin.	414184	0 to 100%, 0 to 10% O ₂	414199	2200° to 3200°F linear
414139	0° to 3000° S T/C non lin.	414185	0 to 200 PSIG, 0 to 30 #/h.	414203	0 to 5000 PSI linear
414146	0° to 2000° K T/C non lin.	414187	.005 to 0 to .005 inch	414205	0 to 150 MW & -80 to 100 MVARS alternating grid
414147	0 to 15 linear	414188	-400 to 800 megw/megvars	414209	0° to 500 °F J T/C non lin.

Dual Side By Side Grids; Each Approximately 4 3/4" Wide (120 mm)

414045	Both grids -30 to +50	414053	Both grids 50 to 0 to 50	414201	Both grids 50 to 250 linear
414046	Both grids 0 to 100	414124	Both grids -30° to +120°		

Custom Chart Papers, 100 ft. rolls (10 to 12 weeks delivery). Minimum order of 50 rolls
 One time set-up charge \$300.00 25 to 99 rolls.....\$22.00 each 100 more.....\$18.00 each

Chart Paper and Pens, For Models 221, 222, 310, 312 (4 Inch Wide Charts)

Disposable Fiber Tip Pens \$13.85/pack of 5	Standard Chart Paper P/N 414057 (0 to 10) grid, 32 ft.pack, 1 to 23 packs.....\$5.25 per pack 24 packs or more.....\$4.75 per pack Optional 4" fan-fold chart papers listed below, minimum order 25.....\$6.15 per pack 50 packs and up.....\$5.00 per pack Custom paper is available in minimum orders of 50 packs at \$5.75 per pack, plus a \$300. one time set-up charge.
Round Body Pens for Model 310 & 310-S 412001-Blue 412003-Black 412002-Red 412004-Green	414007 0 - 360°; 0 - 180° 414073 -20° - 165° 414115 0 - 250 ; - 180 PSIG 414123 0 to 100 PSIG 414014 0 - 10 GE 414085 0 - 30 414116 0 - 200 ; 0 - 100 PSIG 414125 0 to 180° 414024 0 - 1200° 414086 0 to 40 414117 0 - 150 ; 0 - 50 PSIG 414128 0-10m 10-0 cm 414025 0 - 1600° 414087 0 to 20 square root 414118 0 to 100 ; 0 to 50 PSIG 414129 50 to 0 to 50 414026 0 - 2000° 414104 30 to 50 API Gravity 414119 0 to 50 PSIG 414131 0 - 100° & 0 - 500° 414038 0 - 10; 2 Sprocket 414106 50 to 70 API Gravity 414120 0 to 1000 PSIG 414140 0 to 14 414042 0 - 1000 microns 414108 10 to 0 414121 0 to 800 PSIG 414059 5 to 45 14110 30-70 & 110-150 API Gravity 414122 0 to 200 PSIG

TERMS: Net 30 Days

F.O.B.: Pittsburgh, PA USA

MINIMUM INVOICE: \$20.00

M-Tek Recorders are manufactured by Vacuum Research Limited. Please address orders to Vacuum Research at the address shown below.



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