

## Honeywell 180 mm Digital Strip Chart Recorders

- 180 mm (7") Chart Width
- 0.05% Accuracy FS
- Each Input Span Adjustable within Selected Range, with Up to 2 Ranges Per Input
- Universal (T/C, RTD, mV, mA, V) or Linear Input (mV, mA, V)
- Fast Input Scanning (20/sec)
- Fully Documented Chart with Trace, Alarm in Red Tagging, Zooming, Zoning, Trend, Tabular, and Messages
- Up to 6-Color Printing
- I/O Capability: Up to 24 Analog Inputs, Up to 36 Output Relays, and Up to 36 Digital Inputs
- Advanced Math Package
- Fully Configurable Through the Front Keys, Front PC Jack, or Communications Link
- 2 Configurable Chart Speeds
- Firmware Upgradable by PC (Flash Memory)
- Up to 48 Alarm Set Points Freely Assignable on Analog Inputs, Maths, Communication
- PC Application Software (LPCS) for Trending, Monitoring, Archiving, and Configuration
- Up to 8 Retransmitting Outputs (4 to 20 mA)
- Universal Communications Output: ASCII, MODBUS RTU, and RS-232/422/485



DPR180

### Ordering Information

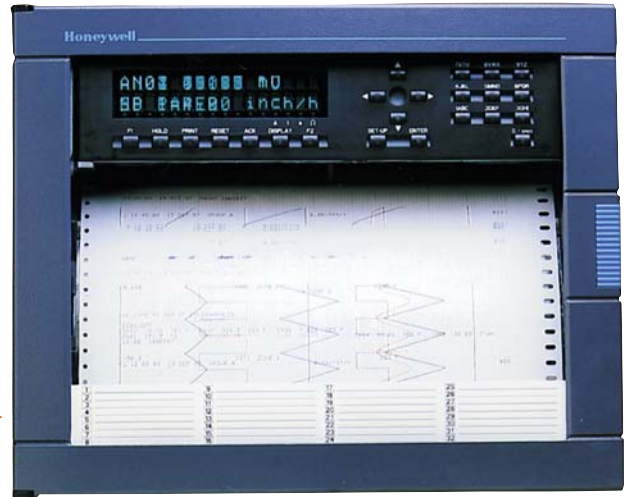
Order #	Description	Price
MPD18-U00000-000000-0000-A	180 mm Strip Chart Recorder with 4 Universal Inputs with CSA	
MPD18-U00000-A00000-0000-A	180 mm Strip Chart Recorder with 4 Universal Inputs and 6 Alarm Relays with CSA	

**NOTE:** A wide selection of options are available for this Honeywell product. Contact Transcat for help in selecting the option codes and features to meet your requirements.

This recorder is especially suited to match the needs of chemical, pharmaceutical, power generation, metals processing, environmental monitoring, and other applications.

## Honeywell 250 mm Digital Strip Chart Recorders

- 250 mm (10") Chart Width
- 0.05% Accuracy FS
- Universal (T/C, RTD, mV/V, mA) or Linear Input Board (mV/V, mA)
- Fast Scanning of Inputs (20/sec)
- Fully Documented Chart with Trace, Color Assignment, Thin or Thick Trace, Alarm in Red Tagging, Zooming, Zoning, Trend, and Tabular Messages
- I/O Capability: Up to 64 Analog Inputs, Up to 48 Output Relays, and Up to 48 Digital Inputs
- Advanced Math Package
- Fully Configurable through the Front Keys, Front PC Jack, or Communications Link
- 2 Configurable Chart Speeds
- Firmware Upgradable by PC (Flash Memory)
- Up to 64 Messages of 64 Characters
- Up to 64 Alarm Set Points Freely Assignable on Analog Inputs, Maths, and Communication
- Up to 48 Internal Output Relays
- PC Application Software (LPCS) for Trending, Monitoring, Archiving, and Configuration
- Up to 8 Retransmitting Outputs (4 to 20 mA)
- Universal Communications: ASCII, MODBUS RTU, and RS-232/422/485



DPR250

### Ordering Information

Order #	Description	Price
MPD25-U0000000-00000000-000	250 mm Recorder, 4 Universal Inputs with CSA	
MPD25-U0000000-A0000000-000	250 mm Recorder, 4 Universal Inputs and 6 Alarm Relays with CSA	

**NOTE:** A wide selection of options are available for this Honeywell product. Contact Transcat for help in selecting the option codes and features to meet your requirements.

This recorder is ideal for pharmaceutical, power generation, metals processing, environmental monitoring, and other applications where the best chart resolution is required.

## Eurotherm Chessell 392 Circular Chart Recorder

- 1 to 4 Universal Input Channels
- 40-Character Vacuum-Fluorescent Digital Display
- 1 or 2 Independent, Case-Mounted Single or Dual Output PID Controllers
- Simple On-Site Configuration Using Control Panel
- Math Functions

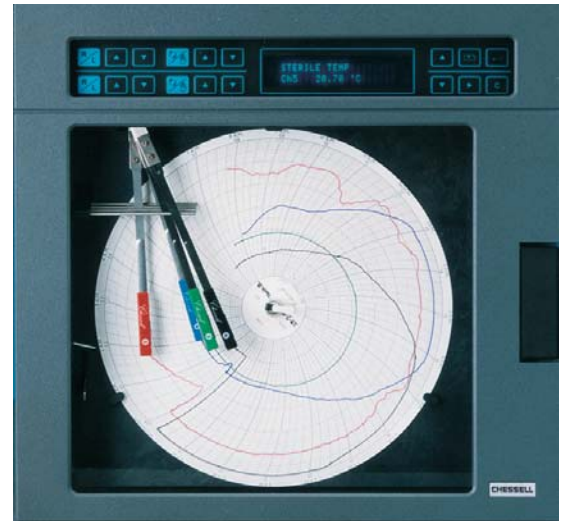
The Eurotherm Chessell Model 392 provides the latest recorder technology with a proven servo motor drive system. Design and solid construction of the Model 392 makes maintenance, field upgrade and the addition of features, fast, easy and affordable. Recorder functions can be configured quickly and easily using the six front panel keys. Operator functions are separated from configurable items by password protection.

### Specifications

Number of inputs:	1, 2, 3 or 4
Input Types:	DC Volts, DC millivolts, DC milliamps (with shunt), 11 Thermocouple Types, 2- or 3-wire RTD, Contact closure/logic low
Chart Speeds:	1 to 4096 hours/revolution
Power:	Standard: 90 to 264V at 45 to 65 Hz
Linearizations:	T/C Types: B, C, E, J, K, L, N, R, S, T, Ni/NiMo RTD Types: Pt100, Cu10, Ni100, Ni120
Voltage Inputs:	4 mV to 5V (100V with attenuator)
Current Input:	Across 250Ω shunt

### Ordering Information

Order #	Mfg#	Description	Price
MP392/21/100/STD	392/21/100/STD	2-Channel Circular Recorder	
MPLA203291	LA203291	Channel 1-Pen (pack of 5 Blue)	
MPLA203292	LA203292	Channel 2-Pen (pack of 5 Red)	
MP50U50	GDTW0050U50	Box of 100, 50 div. 24 Hr. Paper	



392/21/100/STD ▲

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## Eurotherm Chessell 4103C Strip Chart Recorder

- 1-4 Pen Continuous Trace with Annotation Option
- 4-Color Digital Display with Analog Bargraphs
- Roll or Z-Fold Chart
- Front Panel or PC, Local or Remote Configuration
- Universal Isolated Inputs

4103C/BOLZ/STD ▶

The 4103C is a 1 to 4 continuous pen instrument with an 8 Hz sample rate. The unit has the option of a PC card drive for multiple configuration storage, transfer of process data to computer database or spread sheet packages. Extensive mathematic capabilities include totalizers, timers and counters as well as application specific equations. The 4103C's annotation allows scale and message printing and time tagged numerical values to be printed on the chart.

### Specifications

Input Types:	DC Volts, DC millivolts, DC milliamps (with shunt), Thermocouple, 2- or 3-wire RTD, Contact closure (not chan. 1) >60 ms
Chart Speeds:	0 to 36,000 mm/hr.
Maximum number of inputs:	4
Input ranges:	-8 mV to + 10V
Linearizations:	T/C Types: B, C, E, J, K, L, N, R, S, T, Ni/NiMo RTD Types: Pt100, Pt1000, Ni100, Ni1000, Cu10
Voltage inputs:	4 mV to 5V (100V with attenuator)
Current input:	Across 250Ω shunt



### Ordering Information

Order #	Mfg #	Description	Price
MP4103C/B01Z/STD	4103C/B01Z/STD	2-Pen, 100 mm Strip Chart Recorder	
MPLA249551	LA249551	Pen 1, Blue	
MPLA249552	LA249552	Pen 2, Red	

Recorders and Data Acquisition

## Yokogawa 100 mm Chart Recorders

*Versatile and simple to operate, these units let you rest easy*

- High Performance, Economical Cost
- Choose from One-, Two-, or Three-Pen or Six-Dot Models
- Compact—Measures Just 175 mm Deep
- Splash and Dustproof Front Door

### Better Reliability and Visibility, Smaller Size

These recorders are constructed with a brushless DC servo motor and an ultrasonic pen-positioning system that eliminate the usual sources of mechanical wear. The pen system also corrects for temperature variations to ensure that the positioning remains precise. And the splash and dustproof front door provides extra protection in severe industrial environments.

For at-a-glance readability, even from a distance, the recorders provide you with a half-inch high digital display. The front panel lets you quickly verify in-operation parameters like measured values, date/time, alarm indications, and chart speed. Initial setup is easy, too. Program your inputs and ranges, alarm settings, etc., and visually verify what you're doing as you set them. These panel-mounted units measure only 175 mm deep, so they take up minimal space.

**Each Unit Includes:** Set of pens or cassette ribbon, pack of Z-fold chart paper, mounting brackets, and instruction manual.



**SR10**

### Specifications

Input Types and Ranges	
DCV:	20 mV, 60 mV, 200 mV, 2V, 6V, 20V
Temperature:	T/C: R, S, B, K, E, J, T, N, W, L, U; RTD: Pt100, JPt100
DCA:	DC current signal input (requires shunt resistor)
Measurement Accuracy (digital)	
DCV:	(0.3% of rdg + 4 digits) or better, range dependent
T/C and RTD:	0.2% of rdg base accuracy or better
Digital Display	
Resolution:	10 $\mu$ V to 10 mV, DCV; 0.1 C, T/C and RTD
Recording	
Accuracy:	Measurement accuracy (0.3% of recording span)
Measurement Interval:	250 msec/channel, pen models; 10 sec/6 channels, dot model
Recording Width and Paper:	100 mm; Z-fold chart, 16m long
Recording Cycle:	Continuous, pen models; 6 channels/30 sec, max, dot model
Chart Speed:	10 to 6,000 mm/hr, 21 steps, pen models; 10 to 1,200 mm/hr, 18 steps, dot model
Chart Speed	
Accuracy:	Within $\pm 0.1\%$ (>1,000 mm continuous run and related to chart grid)
Alarms:	Up to 2 levels per channel; choose from High or Low
Display:	Digital LED, 7-segments
Operating Environment	
Environment:	0 to 50°C, 20 to 80% RH (at 5 to 40°C)
Power Supply:	90 to 132/180 to 250 VAC, 50/60 Hz
Dimensions:	5.67 x 5.67 x 6.89" HWD (144 x 144 x 175 mm)
Weight:	3.31 lbs (1.5 kg) or less, pen models; 3.75 lbs (1.7 kg), dot model

### Ordering Information

To Order—Insert Number Code for Each Letter to Select Catalog Number

Order Example: MPSR10-3-E-1/A1/D2

A	B	C	D	E	Price & Adders
A	Basic Unit <b>MPSR10</b>				Price & Adders
B	Recorder Type				
	1	1-Pen Continuous Writing			
	2	2-Pen Continuous Writing			
	3	3-Pen Continuous Writing			
	6	6-Point Dot Printing			
C	Input Type				
	-E-1	DC Voltage and Thermocouple Input			
	-E-2	RTD Input (6-Dot Model only)			
D	Output Relays				
	/A1	2-Alarm Output Relays			
	/A2	4-Alarm Output Relays			
E	Additional Options				
	R1	Remote Controls			
	/D2	User-Selectable °F or °C for TC and RTD Inputs			

### Accessories

Order #	Description	Price
MP415920	Shunt Resistor for Screw Input Terminal, 250 $\Omega$ $\pm 0.1\%$	
MP415921	Shunt Resistor for Screw Input Terminal, 100 $\Omega$ $\pm 0.1\%$	
MP415922	Shunt Resistor for Screw Input Terminal, 10 $\Omega$ $\pm 0.1\%$	
MPM1100JE	Power Cord, 16 AWG, 8 Foot, with Spade Lugs	
MPM1100JT	6-Inch Panel Adapter	
MPB9565AW	Z-Fold Chart Paper, One Each	
MPB9902MY	Roll Chart Paper, One Each	
MPB9901AX	Six-Color Ribbon Cassette, One Each	
MPB9902AM	Disposable Felt Pen Cartridge, Red, Three Each	
MPB9902AN	Disposable Felt Pen Cartridge, Green, Three Each	
MPB9902AP	Disposable Felt Pen Cartridge, Blue, Three Each	
MPB9902AQ	Disposable Felt Pen Cartridge, Violet, Three Each	

## Yokogawa Recorder 100 mm

- Universal Inputs
- Solid-State Construction Reduces Moving Parts, Increases Reliability
- Pen-Printing Models in One-, Two-, and Three-Channels
- 6-Channel Dot-Printing Model
- Extra-Large 1/2" Digital Display (7-Segment LED)
- 10-Year Lithium Battery Back-Up
- Compact Design (8.66" in depth)
- Digital Communications and Relay-Output Options
- View Data and Program—All from the Front Panel

### Universal Inputs with Full Front-Panel Programming

You can program each channel for a wide variety of input types: DCV (mV and V ranges), T/C, RTD, DCA (w/external resistor), even digital input for operation recording. Set inputs and ranges on the front panel; no playing with DIP switches or switching circuit cards.

Once you've set your inputs and made your connections (via removable terminal blocks), select from a number of recording and printing functions. These include continuous analog recording with optional zone selection; periodic digital printout; scale, alarm, message printouts; and more.

### Options if Your Application Demands More

If you need extra capability, choose from alarm-output relays, RS-422A communications interface, extra RTD or T/C input, and remote-control option.

**Each Unit Includes:** Colored pens (1–3) or cartridge (6), one package Z-fold chart paper, and instruction manual.

### Specifications

<b>Input</b>	
<b>Input Types</b>	
DCV:	20 mV, 60 mV, 200 mV, 2V, 6V, 20V
Thermocouple:	R, S, B, K, E, J, T, N, W, L, U
RTD:	Pt 100, JPt 100
Contact:	DI 1 voltage input, DI 2 contact input for operation recording
DCA:	With external resistor
<b>Measurement Accuracy</b>	
DCV:	From 0.1% of rdg + 2 digits to 0.3% of rdg + 3 digits, range dependent
T/C and RTD:	0.1°C
Recording Accuracy:	Measurement accuracy (0.3% of recording span)
Measurement Interval:	125 msec/channel, pen models; 5 sec/6 dots, dot model
<b>Chart Speed</b>	
Pen Models:	10 to 12,000 mm/hr in 40 increments
Dot Model:	10 to 1,500 mm/hr in 28 increments
<b>General</b>	
Power Supply:	90 to 132/180 to 250 VAC, 50/60 Hz
Size:	5.67 x 5.67 x 8.66" HWD (144 x 144 x 220 mm)
<b>Weight</b>	
Pen Models:	6.8 lbs (3.1 kg), 1-pen unit; 7.3 lbs (3.3 kg), 2-pen unit; 7.7 lbs (3.5 kg), 3-pen unit
Dot Model:	7.5 lbs (3.4 kg); 6-Pen



23782E

**Recorders are panel mounted, compact to take up minimal space, and have a splash-proof front door for protection.**

### Ordering Information

To Order—Insert Number Code for Each Letter to Select Catalog Number  
Order Example: MP23782E-3-D2-A1

A	B	C	D	Price & Adders
A	Basic Unit MP23782E			DIN Strip Chart Recorder
B	Description			
	1			1-Pen Recorder
	2			2-Pen Recorder
	3			3-Pen Recorder,
	6			6-Pen Recorder, Dot Printing
C	Language			
	D2			English
D	Options			
	0			None
	A1*			2 Alarm Relay (form C)
	A2*			4 Alarm Relay (form C)
	A3*			6 Alarm Relay (form C)
	C3			RS422A Communications Interface
	R1			Remote Controls/Digital Inputs (5)

\* Only 1 of the A1, A2, A3 options may be specified.

### Accessories

Order #	Description	Price
MPB9565AW	Z-Fold Chart Paper, 0–100 10Roll	
MPB9901AX	6-Color Ribbon Cassette (1 pc/unit)	
MPB9902AM	Disposable Felt Pen—Red (3 pc/unit)	
MPB9902AN	Disposable Felt Pen—Green (3 pc/unit)	
MPB9902AP	Disposable Felt Pen—Blue (3 pc/unit)	
MPB9902AR	Plotter Pen—Purple (3 pc/unit)	
MPB9900CW	Panel Mounting Bracket (1 pc/unit)	

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Recorders and Data Acquisition

## Fuji 3-, 6- or 12-Channel Recorders

- 3-, 6-, and 12-Channel Models
- Accepts T/C, RTD, V, mV, and mA Inputs
- 6-Color Recording
- Programmable Data Logging, Chart Zoning and Zooming
- Report-Generation Capabilities
- Three-Year Warranty

### 100 and 180 mm Chart Recorders Deliver Great Versatility

This family of multi-channel strip chart recorders offers 3-, 6- and 12-channel versions. The 3- and 6-channel models have charts 4"/100 mm wide, while the chart on the 12-channel model is 7"/180 mm wide. All versions are less than 8" deep to permit easy rack or panel mounting.

The six-color ink jet printing technology provides the ability to record multiple channels without time correlation errors. One color cartridge lasts for up to six months of continuous operation.

Each channel is separately configurable, and will accept input from virtually all common thermocouples; RTDs; and millivolt, volt, and current devices, including the standard 4 to 20 mA span typical of process instruments.

Full programmability is built-in, and includes engineering units and chart speed. The two-line fluorescent display shows current operating conditions and parameters at a glance.

### Options Add Even More Versatility

Choose cold cathode chart illumination for easy viewing under low light conditions. The alarm output module provides relay outputs for all channel alarms. Alarm option is field-installable at any time.

**Each Unit Includes:** Recording head, one pad chart paper, panel mount attachments, and instruction manual.



▶ PHA98002-EAOYV



▼ PHC33003-AAOYV

### Specifications

Mfg#	23288E/23290E	23292E
Chart Width/Length:	100 mm/15m; 4"/49.2 ft	180 mm 20m; 7"/65.6 ft
No. of Input Channels:	3 or 6	12
Chart Speed:	5–400 mm/hr cont. trace; 401–1500 mm/h intermittent trace	5–300 mm/hr cont. trace; 301–1500 mm/h intermittent trace
Signal Types:	T/C: J, K, E, R, B, S, T, L, U, W, PN, N; RTD: Pt100 DCV: ±50 mV, ±500 mV, ±5V, ±50V; DCI: 4–20 mA, 10–50 mA	
Measuring Cycle:	3-Ch: 160 ms; 6-Ch: 320 ms	320 ms
Display Accuracy:	±0.15% of meas range ±1 digit without cold junction compensation error	
Analog Trace Accuracy:	±0.25% of recording range	
Calculations:	Square root extraction, subtraction, scaling, input filter	
Reports:	Daily report, totalize list, parameter list, measured value list, logging print	
Alarm:	H, L, RH, RL for each input; burnout; ink out; chart end; battery alarm	
Oper. Environment:	32–122°F/0–50°C	
Display:	Fluorescent 20-char x 2 line	
Power Supply:	85–150 or 150–300 VAC, 50/60 Hz Switchable	85–300 VAC, 50/60 Hz Switchable
Size/Weight:	5.67 x 5.67 x 7.83" HWD/ 6.17 lbs; 144 x 144 x 199 mm HWD/2.8 kg	11.34 x 11.34 x 7.83" HWD/ 12.27 lbs; 288 x 288 x 199 mm HWD/6 kg

### Ordering Information

Order #	Mfg #	Description	Price
MP23288E	PHC33003-AAOYV	Recorder 3-Channel Ink Jet	
MP23288E-CL	PHC33002-ABOYV	Recorder 3-Channel Ink Jet with Chart Illumination	
MP23290E	PHC66002-AAOYV	Recorder 6-Channel Ink Jet	
MP23290E-CL	PHC66003-AAOYV	Recorder 6-Channel Ink Jet with Chart Illumination	
MP23292E	PHA98002-EAOYV	Recorder 12-Channel Ink Jet	
MP23292E-CL	PHA98003-EBOYV	Recorder 12-Channel Ink Jet with Chart Illumination	
MP23294E	PHZ1001	Replacement Ink Jet Recording Head	
MP23296E-36	PEX00DLI-5000B	Chart Paper for 3- and 6-Channel Models	
MP23296E-12	PEX00BLI-1000B	Chart Paper for 12-Channel Model	
MP23298E-36	PHZK1601	Alarm Output Option for 23288E and 23290E	
MP23298E-12	PHZK8701	Alarm Output Option for 23292E	

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## Dickson Universal Input Recorder

- Designed for Use with Transmitters
- Chart Ranges Allow Scaling to DC Input
- High/Low Audio-Visual Alarms
- Record pH, Conductivity, Pressure, Flow RH, Temperature, Level, and Much More

The 22384E will record measurements taken by any powered voltage or current transmitter. Combine this recorder with a transmitter of your choice, and you have a package which records pressure, temperature, pH, RH, or any other process parameter. Recording time is user-selectable at 24-hour, 7-day, and 31-day. You can choose from 20 different chart scales. A built-in digital display provides local indication of the process input.

**Each Unit Includes:** Red pen, box of sixty 8" charts (0 to +100/7-day charts), AC Adapter, and instructions.

**NOTE:** Four D cell alkaline batteries used for back-up power are NOT included.



ESX ▲

### Specifications

Input Ranges:	User-selectable: 0–20 mA, 4–20 mA, 0–5 VDC, 1–5 VDC
Output Ranges:	User-selectable, including decimal point selectability
Recorder Accuracy:	Approx. 0.3% FS ±1 digit (recorder only)
Sensor Capability:	Any powered transmitter (V or I) with specified input range
Display Resolution:	0.001, 0.01, 0.1, or 1 depending on range selected
Recording Time:	User selectable: 24-hour, 7-day and 31-day
Average Response Time:	20 seconds FS, depending on transmitter
Power Supply:	120 VAC adapter, with 220V for international use available
Back-Up Power:	Supplied by 4 D cell alkaline batteries (not included)
Size/Weight:	10.5 x 13.2 x 2.8" HWD/ 7 lbs

### Ordering Information

Order #	Mfg #	Description	Price
MP22384E	ESX	Universal Input Recorder (ESX)	
MP22384E-220	R010	220 VAC Adapter	
MP22385E	P222	Replacement Pack of 6 Red Pens	
MPC498	C498	Charts, Recording Range 0 to +10 (7-Day)	
MPC410	C410	Charts, Recording Range 0 to +100 (24-Hour)	
MPC456	C456	Charts, Recording Range 0 to +200 (24-Hour)	
MPC463	C463	Charts, Recording Range 0 to +30 (7-Day)	
MPC431	C431	Charts, Recording Range 0 to +300 (7-Day)	
MPC405	C405	Charts, Recording Range -10 to +10 (7-Day)	

**NOTE:** This list represents the most popular ranges. Please see page E19 for other chart scale ranges.

## Rustrak DC Recorders

- ±2% FS Accuracy
- Single-Channel Version

### Permanent Inkless Recording of Measured DC Voltage and Current

These galvanometric DC recorders are single-channel models, providing ±2% of Full Scale accuracy.

1. Specify recorder by catalog number.
2. Select range code from chart.

The 7775E is available in the ranges listed and has a chart speed of one inch per hour. Each unit includes one roll of chart paper and an instruction manual.

**NOTE:** Other ranges, chart speeds, and dual-channel versions are available; please contact Transcat for more information.

### Ordering Information

Order #	Mfg#	Description	Price
MP7775E-□-1	288	Single-Channel Recorder	

**NOTE:** These units are supplied with a standard 1K input impedance. Please notify Transcat at the time of order if 4.7K input impedance is required.

### Ranges

Range	Code	Price Single- Channel
4–20 mA	4	
0–5V	11	
0–30V	13	
0–1 mA	14	

### Chart Paper for 7775E

Order #	Major/Minor Div.	Price
MP7778E	4/20	
MP7779E	6/30	
MP7780E	8/40	
MP7781E	10/50	



7775E ▲

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Recorders and Data Acquisition

## Kipp & Zonen Flatbed Recorders

- 15 DC Voltage Ranges (1 mV to 50V)
- 11 Chart Speeds (200 mm chart)
- One- or Two-Pen Versions
- High Recording Resolution
- Two-Year Warranty

These recorders are built for durability and dependability. Their DC servo drive is a sealed-potentiometric-feedback system, and is electronically protected against damage in overrange situations. The microprocessor-based chart drive utilizes a quartz clock that maintains accurate chart speeds, regardless of supply voltage or frequency fluctuations. And the pen system features a toothed-belt drive and lightweight carriage for reliable, quiet operation. The recorder can be used in its standard horizontal position or inclined up to 30°.

**Each Unit Includes:** One roll chart paper (230 mm wide x 25m long), one (GSE 102-1) or two (GSE 102-2) disposable felt pens, spare fuse, power adapter, and user's manual.



▲ GSE102-12

### Specifications

Input	
Ranges:	1, 2, 5, 10, 20, 50, 100, 200, 500 mV DC 1, 2, 5, 10, 20, 50 VDC
Accuracy:	0.5% of FS
Chart Speeds:	1, 2, 6, 12, 30 cm/hr; 1, 2, 6, 12, 30, 60 cm/min
Zero-Point Adjustment:	-5 to +105% of FS
Safety Compliance:	IEC, CE, UL
Power Supply:	10 to 28 VDC thru power adapter
Size (HWD):	5.4 x 12.6 x 12.7" (137 x 320 x 323 mm)

### Ordering Information

Order #	Mfg #	Description	Price
MPGSE102-1	GSE102-11	Single-Pen Flatbed Recorder	
MPGSE102-2	GSE102-12	Two-Pen Flatbed Recorder	
MPGA271-10	GA271-10	10 Rolls of Chart Paper	
MP6411E	GA536-74	Pack of 5 Red Disposable Pens, Channel 1	
MP6412E	GA536-75	Pack of 5 Blue Disposable Pens, Channel 2	

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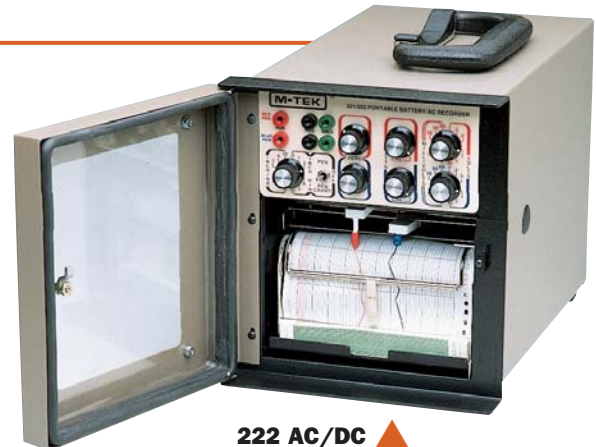
## M-Tek DC Recorder

- One- and Two-Pen Models
- Twelve Ranges, Twelve Chart Speeds
- Battery or AC Operation
- Front and Rear Panel Inputs

### Portable Recorders Offer A Wide Choice of Ranges, Speeds, and Features

These compact, 12½ - pound battery or AC-powered recorders feature twelve switch-selectable Full Scale ranges from 1 mV to 10V, with a variable 5x attenuator allowing inputs up to 50 VDC. A precision servo delivers better than 0.5% Full Scale accuracy. Twelve chart speeds are instantly available with a front-panel switch—½, 1, 2, 3, 6, 12, and 30 inches/hour and 1, 2, 4, 5, and 10 inches/minute. The internally stored 32-foot stack of fan-fold paper allows up to a month of recording at the slowest speed.

**Each Unit Includes:** Internal battery with built-in charger, line cord (128151), one pack chart paper (414057), disposable fiber tip pen(s) 7853E (1 blue) or 7854E (1 blue/1 red), and instruction manual.



222 AC/DC ▲

### Specifications

Chart Speeds:	0.5, 1, 2, 3, 6, 12, 30 in/hr; 1, 2, 4, 5, 10 in/min
Input Ranges:	1, 2, 5, 10, 20, 50, 100, 200, 500 mV; 1, 5, 10V FS
Attenuator:	Variable 5x provides max input of 50V
Accuracy:	Better than ±0.5% FS
Zero Adjust:	±100%, all ranges
Dead Band:	<0.15% FS
Paper Supply:	32 ft/9.6 meter fan-fold paper stored inside instrument
Power Supply:	12 VDC rechargeable battery and 110 VAC 60 Hz (220V optional)
Size/Weight:	7.9 x 7.0 x 12.5" HWD/12.5 lbs; 201 x 178 x 318 mm HWD/5.7 kg

### Ordering Information

Order #	Mfg #	Description	Price
MP7853E	221	DC Chart Recorder, 1 Pen	
MP7853E-220	221-220V	DC Chart Recorder, 1 Pen, 220V	
MP7854E	222 AC/DC	DC Chart Recorder, 2 Pen	
MP7854E-220	222-220V	DC Chart Recorder, 2 Pen, 220V	
MP4705E	412022	Replacement Pen, Blue (Pk/5)	
MP4706E	412023	Replacement Pen, Red (Pk/5)	

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