

NEW MODULE ACCESSORIES

POWER SUPPLIES
MOUNTING PANELS
INDICATOR LIGHTS

digital

POWER SUPPLIES

The chart below summarizes the key features of some of DEC's standard power supplies designed for primary system power. All power supplies will withstand prolonged short-circuited operation without damage and provide efficient regulation with DEC modules under all rated conditions of line voltage and load.

| DESCRIPTION | TYPE NO. | PANEL HEIGHT | OUTPUT VOLTS | MAX. OUTPUT CURRENT | PRICE |
|---|----------|---------------------|-----------------|-------------------------|------------------------------|
| New heavy-duty supply for medium and large systems. Provides convenient taper-tab and screw terminal output connections. | 783 | 10 $\frac{7}{16}$ " | +10 | 7.5 amps | \$240 |
| | 783-A | | -15 | 8.5 amps | \$250 (50-cycle version)* |
| New Adapter. Mounts on Type 783 drawing 1.5 amps from its -15 volt output. Accepts up to 3 power cables, Type 750. | 784 | | - 3 | 1.2 amps | \$ 48 |
| New low-cost supply for smaller systems. Both taper-tab and screw terminal outputs. | 782 | 5 $\frac{3}{16}$ " | +10 -15 | 0.4 amps 3.0 amps | \$150 |
| New Mounting Panel. Holds 19 standard System Modules and provides power in compact, 5 $\frac{1}{4}$ " space. Complete with fork-solder connectors. Taper pin or wire wrap connectors — \$60 additional. | 1938 | 5 $\frac{3}{16}$ " | +10 -15 | 0.4 amps 3.0 amps | \$230 |
| New Power Control Panel with 2-pole circuit breaker for one-step control and protection of digital systems and auxiliary equipment. | 831 | 3 $\frac{7}{16}$ " | AC LINE | 4, 10, 20 or 30 amps | \$ 51 |
| Primarily for use with Type 743. | 710 | 3 $\frac{7}{16}$ " | +10 | 0.5 amps | \$125 |
| Compact, general-purpose supply. Painted panel harmonizes with Laboratory Modules. Brown "tweed" finish. | 722 | 5 $\frac{3}{16}$ " | +10 | 7.0 amps | \$305** |
| | 722-A | | - 3 -15 | 1.2 amps 6.5 amps | \$330 (50-cycle version)* |
| Similar uses as the Type 722, but for larger systems. +10 volts can be obtained from the Type 710 or another supply used in the same system. | 743 | 5 $\frac{1}{4}$ " | 15 | 8.5 amps | \$290** |
| | 743-A | | (2 supplies) | per supply | \$350 (50-cycle version)* |

*All 50 cycle supplies accept nominal input voltages of 112.5, 123.5, 195, 220, or 235 VAC \pm 10%.

**The following price changes will become effective April 1, 1964.

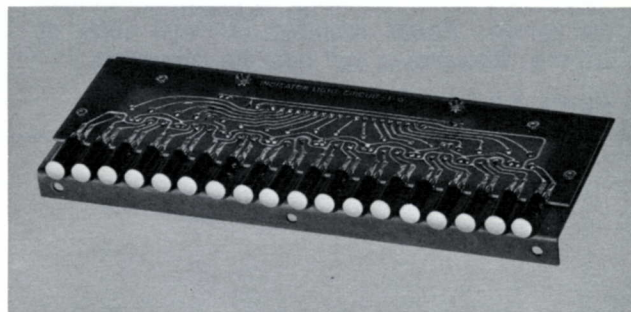
| Type No. | Until April 1, 1964 | After April 1, 1964 |
|----------|---------------------|---------------------|
| 722 | \$305 | \$320 |
| 743 | \$290 | \$340 |

Prices quoted are FOB Maynard, Mass., and apply in continental United States only. Federal, state or local taxes are not included. Quantity prices quoted upon request. All prices are subject to change without notice.

digital**MODULE
ACCESSORIES****4901-2-3-6-8**
INDICATOR LIGHTS**TYPE 4903****18 INDICATORS WITH AMPLIFIERS**

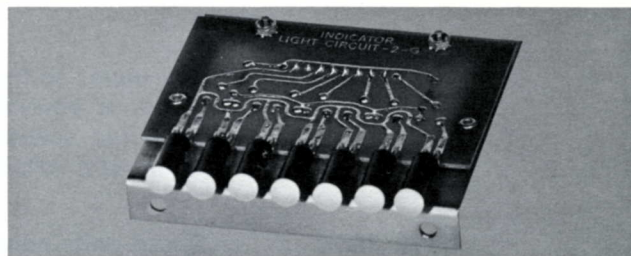
Bracket containing 18 indicator bulbs and transistor drivers. Mounting holes provided. Power required is -15 volts at 540 ma. Amphenol connector provided for input. Overall dimensions are $9\frac{1}{2}'' \times 3\frac{3}{4}'' \times 1\frac{1}{8}''$.

PRICE \$96

**TYPE 4902****7 INDICATORS WITH AMPLIFIERS**

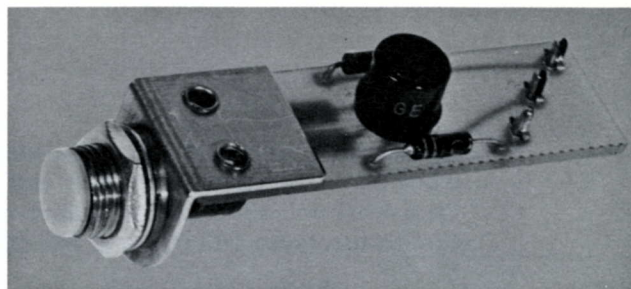
Same as 4903 except with 7 indicator bulbs and transistor drivers. Power required is -15 volts at 210 ma. Overall dimensions are $4'' \times 3\frac{3}{4}'' \times 1\frac{1}{8}''$.

PRICE \$47

**TYPE 4906****1 INDICATOR WITH AMPLIFIER**

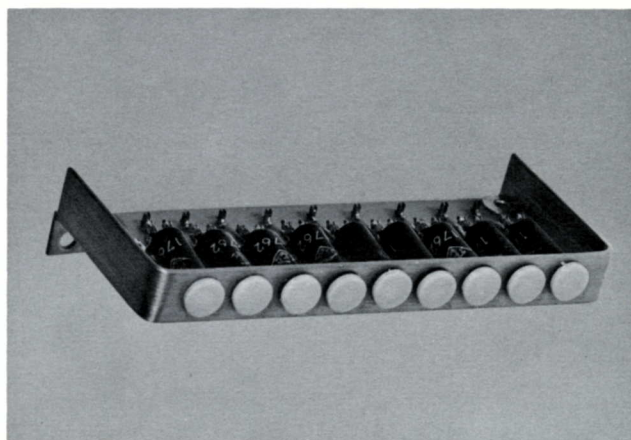
Single indicator lamp with transistor driver. May be panel mounted in $\frac{3}{8}''$ hole; bulb is replaceable from the front. Power required is -15 volts at 30 ma. Overall dimensions are $2\frac{1}{2}'' \times \frac{5}{8}'' \times \frac{7}{8}''$.

PRICE \$9.50

**TYPE 4901****INDICATOR LIGHT BRACKET**

Bracket containing nine 15 volt indicator bulbs. Mounting feet fit under connector mounting nuts of any general-purpose DEC System Module mounting panel. Designed to be driven from Type 1669 or Type 4689 indicator driver modules. Power required is -15 volts at 270 ma. Overall dimensions are $4\frac{1}{2}'' \times \frac{7}{8}'' \times 1\frac{7}{8}''$.

PRICE \$34

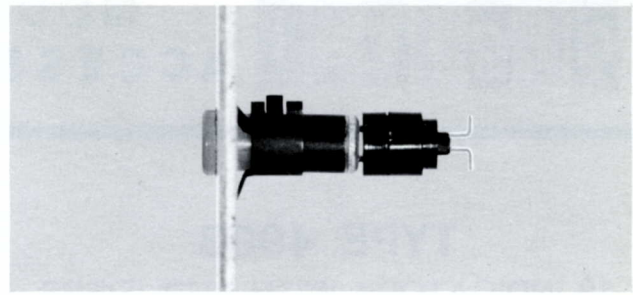


TYPE 4908

PANEL INDICATOR ASSEMBLY

Consists of lamp, spring clip, and terminal. Facilitates panel mounting of individual indicator lamps. Power required is -15 volts at 30 ma. Requires a $\frac{5}{16}$ " hole for mounting.

PRICE \$2.00



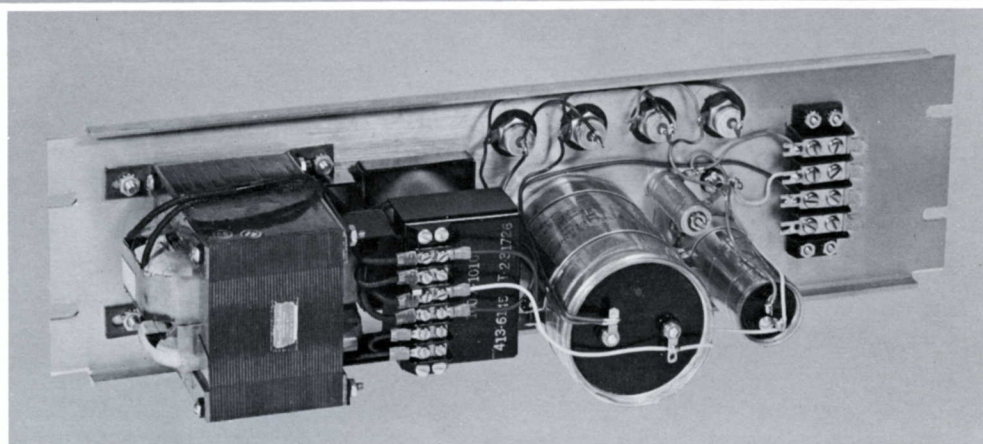
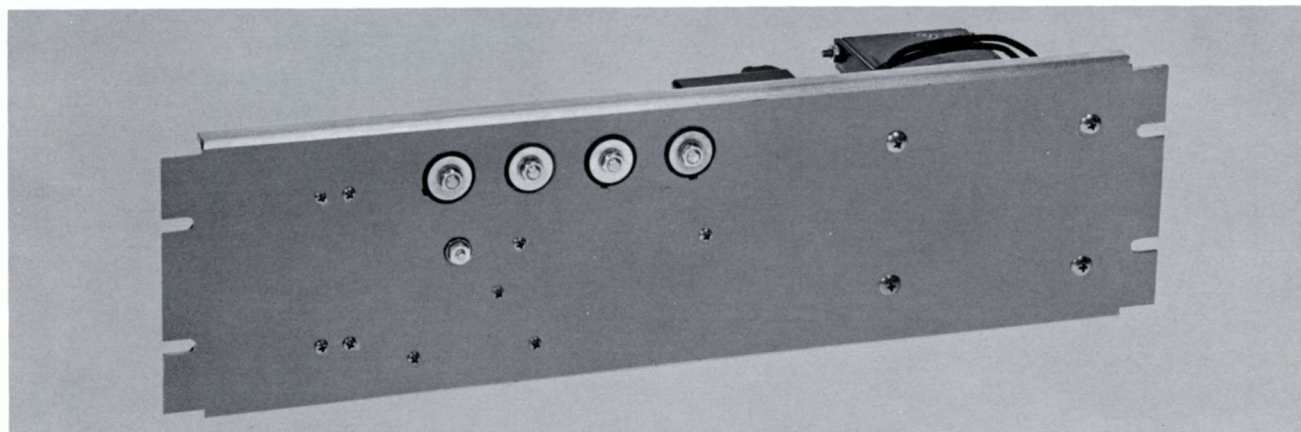
INPUT SIGNAL REQUIREMENTS

| TYPES | REQUIREMENTS |
|------------------|--|
| 4902, 4903, 4906 | The inputs to the transistor drivers require DEC standard levels or equivalent and represent one unit of DC Base Load (no speedup capacitors). Minus 3 volts lights the lamp; zero volts turns it off. |
| 4901, 4908 | These units contain the lamp assembly only and should be driven by indicator drivers such as Types 1669 or 4689. |

All indicators utilize 28 volt bulbs which are operated at 15 volts. This provides more than adequate illumination and greatly extends the life of the bulbs. The Type 4902 and 4903 have indicators on $\frac{7}{16}$ " centers and mate with Amphenol connectors, types 143-010 and 143-022 respectively.

digital MODULE ACCESSORIES

782 POWER SUPPLY



The Type 782 Power Supply is a ruggedly built, low cost power supply which fits a standard 19-inch rack. Providing +10 and -15 volts, it is an ideal unit for powering DEC System Modules for general systems use.

ELECTRICAL CHARACTERISTICS

OUTPUT VOLTAGE: +10 volts, -15 volts dc, floating.

OUTPUT CURRENT: -15 volts: 1/2 amp to 3 amps;
+10 volts: 0 to 0.4 amps.

LINE AND LOAD REGULATION: The output voltage remains between -14.5 and -16 volts for the -15 volt output and within +9.2 and +10.8 volts for the +10 volt output, when load varies from minimum to maximum and line voltage varies from 105 to 125 volts, ac.

P-P RIPPLE: Less than 0.4v for +10 volt output;
less than 0.6v for -15 volt output.

LINE FREQUENCY REGULATION: 60 cycles ± 0.5 cycle.

MECHANICAL CHARACTERISTICS

PANEL WIDTH: 19"

PANEL HEIGHT: 5 3/16"

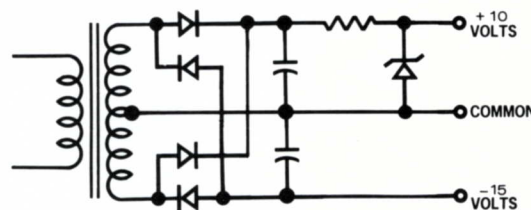
DEPTH: 5 1/8"

FINISH: Aluminum conversion coating (Chromicoat type).

POWER INPUT CONNECTION: Screw terminals provided on transformer.

POWER OUTPUT CONNECTION: Four-terminal barrier strip with screw terminals and tabs which fit Amphenol "Faston" receptacle series 250, part number 41774.

PRICE \$150

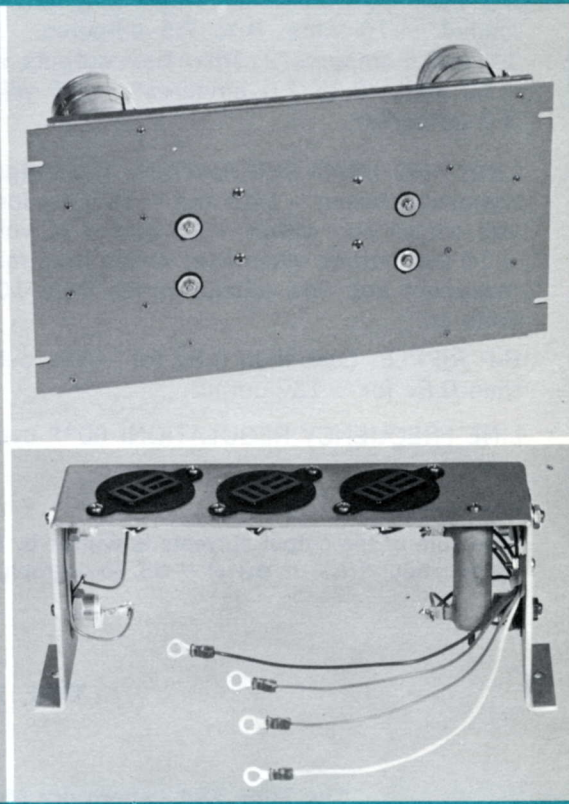
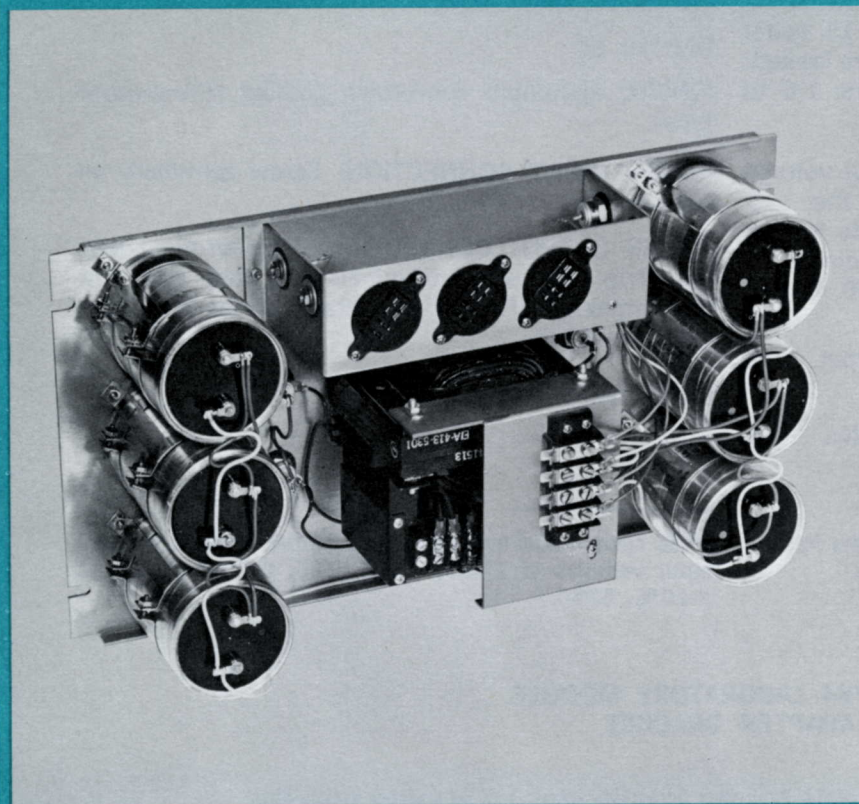


SIMPLIFIED SCHEMATIC TYPE 782

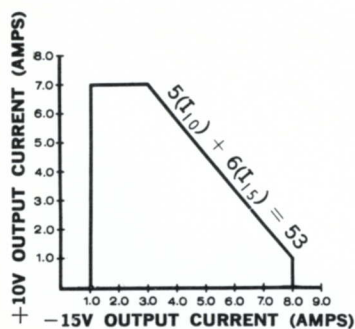
digital

MODULE ACCESSORIES

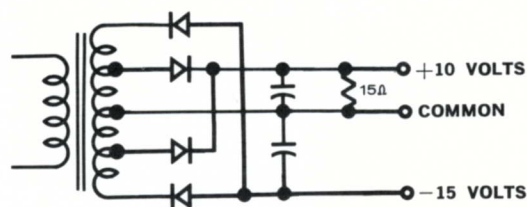
783-784 POWER SUPPLY AND ADAPTER BRACKET



The Type 783 Power Supply (+10, -15 volt) is a simple, rugged supply capable of withstanding wide line and load variation for general systems use. The graph below shows the permissible region of operation when both outputs are used. When used singly, the 10-volt output can supply 0 to 7.5 amperes, or the 15-volt output can supply 1.0 to 8.5 amperes. It is designed for mounting in a standard 19-inch rack. Mounting holes are provided which accept the Type 784 Laboratory Module Adapter Bracket.



COMBINED LOAD OPERATING REGION



SIMPLIFIED SCHEMATIC TYPE 783

ELECTRICAL CHARACTERISTICS

OUTPUT VOLTAGE: +10 volts, -15 volts dc, floating.

OUTPUT CURRENT: 1) When only one output is loaded: +10 volts: 0 to 7.5 amperes, -15 volts: 1.0 to 8.5 amperes. 2) When both outputs are loaded: +10 volts: 0 to 7.0 amperes*, -15 volts: 1.0 to 8.0 amperes*.

LINE AND LOAD REGULATION: The output voltage remains between -14.5 and -16 volts for the -15 volt output and within +9.5 and +11 volts for the +10 volt output, when load varies from minimum to maximum and line voltage varies from 105 to 125 volts ac.

P-P RIPPLE: Less than 0.8v for +10v output. Less than 0.6v for -15v output.

LINE FREQUENCY REGULATION: 60** cycles ± 0.5 cycle.

*The sum of the output currents is limited by the following equation: $5(I_{10}) + 6(I_{15}) = 53$. (See graph).

MECHANICAL CHARACTERISTICS

PANEL WIDTH: 19"

PANEL HEIGHT: 10 $\frac{7}{16}$ "

DEPTH: 6"

FINISH: Aluminum conversion coating (Chromicoat type).

POWER INPUT CONNECTION: Screw terminals on transformer.

POWER OUTPUT CONNECTION: Four-terminal barrier strip with screw terminals and tabs which fit the Amphenol "Faston" receptacle series 250, part number 41774.

PRICE \$240

**50 cycle model available: Type 783-A. Accepts nominal input voltages of 112.5, 123.5, 195, 220, or 235 VAC $\pm 10\%$. \$250.

TYPE 784 LABORATORY MODULE ADAPTER BRACKET

The Type 784 Laboratory Module Adapter Bracket uses 1.5 amperes from the -15 volt output of a Type 783 Supply to produce a -3 volt output at currents up to 1.2 amperes. All voltages (+10, -3, -15) are therefore available at both the terminal block of the Type 783 and at three standard DEC power sockets on the Type 784. The Type 750 Power Cables should be used to convey power from these sockets to Laboratory and Classroom module mounting panels.

REGULATION: -2.8 volts to -3.4 volts for output currents in the range from +1.2 amperes to -1.2 amperes.

PRICE: \$48

digital**MODULE
ACCESSORIES****831
POWER
CONTROL PANEL**

The Type 831 Power Control Panel features a 2-pole circuit breaker which provides convenient one-step control and protection for entire systems, including auxiliary equipment. The panel fits standard 19" racks and is finished with a protective aluminum conversion coating. Specify 4, 10, 20, or 30 ampere capacity when ordering.

HEIGHT: $3\frac{7}{16}$ "

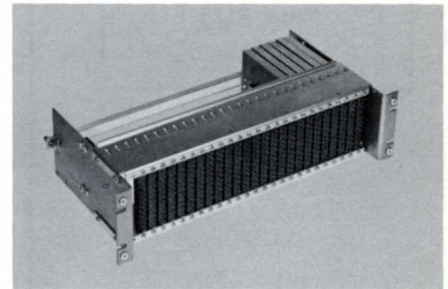
PRICE: \$51.00

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digital**MODULE
ACCESSORIES****1935
MOUNTING PANEL**

REV. 2/64



The Type 1935 Mounting Panel has been designed to give maximum operational flexibility and reliability to systems constructed with Digital Modules. A total of 36 different versions of the Type 1935 are available and may be specified according to customer requirements. Combinations include: choice of connector, endplate setback, and power connection. Optional rear supports permit use of extra length modules. The mounting panel will accommodate 25 Digital System modules. Special features include:

Heavy Duty Sockets — supply high contact pressure for reliable connections.

Staggered-Pin Solder Connectors — facilitate wiring and checkout.

Lettered Contacts — permit positive identification, prevent wiring errors.

Specially Constructed Side Plate Retainers — have raised guides to simplify module insertion and removal.

Filtered Power Connections — tantalum capacitors suppress local noise.

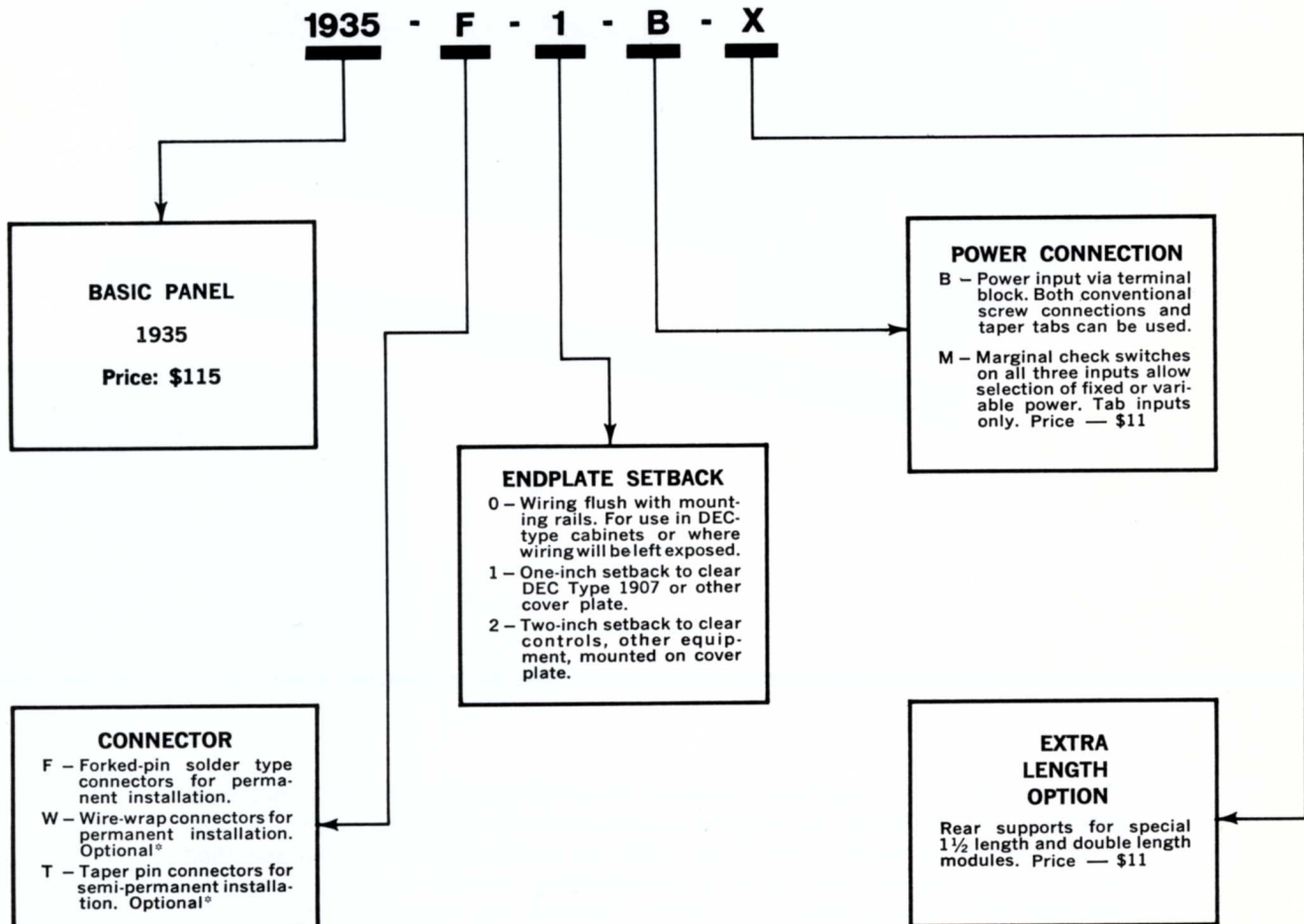
Advanced Mechanical Design — provides improved ventilation.

Optional Hold-Down Bar Type 1936 — reduces vibration and keeps modules securely mounted when panel or system is moved.

TYPE 1935 ORDERING INFORMATION

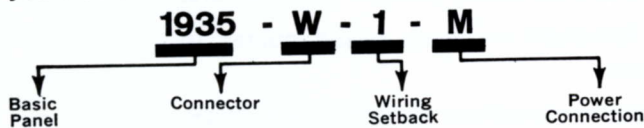
By specifying the connector, endplate setback, and power connection, you will get the model which best fits your requirements. Use the handy chart below

to select the combination you require. Here is a typical example showing all of the categories involved:



EXAMPLE:

If you require a Type 1935 Mounting Panel with wire wrap connectors, endplate setback of one inch, and marginal check switches on the power connection, you would order —

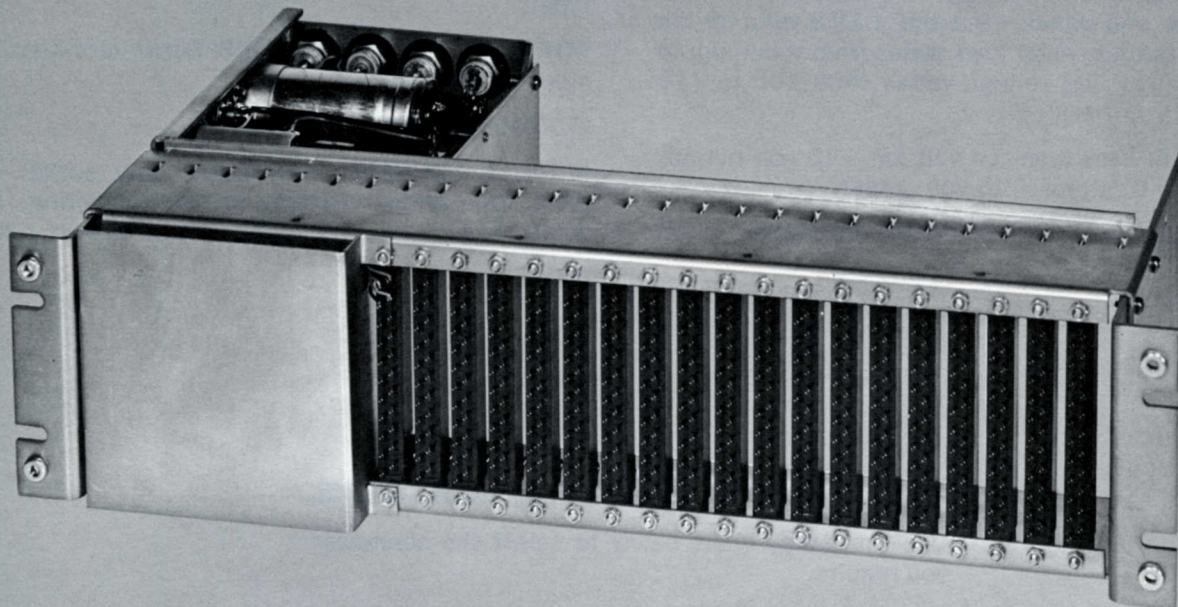


Should you desire the same model as above, but with rear supports for extra length modules, you would order — **1935-W-1-M-X**

MECHANICAL DIMENSIONS: 19" wide; 5 $\frac{3}{16}$ " high; depth depends on endplate setback; 7 $\frac{7}{8}$ ", 8 $\frac{7}{8}$ ", or 9 $\frac{7}{8}$ ".

Tabs for power connections fit Amphenol "Faston" receptacles, Series 250, part number 41774.

TYPE 1936 HOLD DOWN BAR: Option which adds ½" to depth of the Type 1935. Price: \$15.

digital**MODULE
ACCESSORIES****1938**
POWER SUPPLY AND
MOUNTING PANEL

The Type 1938 is a combined power supply and mounting panel for DEC System Modules. It has been designed to fit a standard 19-inch rack and holds up to 19 modules. A choice of three types of connectors are available. The power supply provides up to 0.4 amps at +10 volts, and from 1/2 to 3 amps at -15 volts. Special features include:

Heavy Duty Sockets — supply high contact pressure for reliable connections.

Staggered-Pin Solder Connectors — facilitate wiring and checkout.

Lettered Contacts — permit positive identification, prevent wiring errors.

Specially Constructed Side Plate Retainers — have raised guides to simplify module insertion and removal.

Advanced Mechanical Design — provides improved ventilation.

ELECTRICAL CHARACTERISTICS

OUTPUT VOLTAGE: +10 volts, -15 volts dc, floating.

OUTPUT CURRENT: -15 volts: 1/2 amp to 3 amps;
+10 volts: 0 to 0.4 amps.

LINE AND LOAD REGULATION: The output voltage remains between -14.5 and -16 volts for the -15 volt output, and within +9.2 and +10.8 volts for the +10 volt output, when load varies from minimum to maximum and line voltage varies from 105 to 125 volts ac.

P-P RIPPLE: Less than 0.4 volt for +10 volt output.
Less than 0.6 volt for -15 volt output.

LINE FREQUENCY REGULATION: 60 cycles ± 0.5 cycle.

MECHANICAL CHARACTERISTICS

PANEL WIDTH: 19"

PANEL HEIGHT: 5 3/16"

DEPTH: 11 1/2"

FINISH: Aluminum conversion coating. (Chromicoat type).

POWER INPUT CONNECTIONS: Screw terminals provided on transformer.

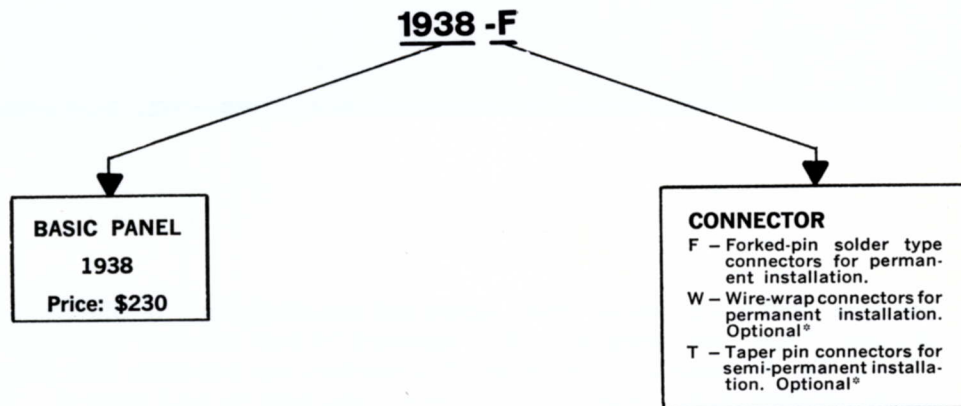
MODULES ACCOMMODATED: 19

MODULE SOCKETS: New heavy duty socket with deep fork solder contacts for logical wiring. Also available with taper pin sockets and wire wrap lugs.

PRICE \$230

TYPE 1938 ORDERING INSTRUCTIONS

Use the handy chart below to select the connector you require.



* additional charge — \$60