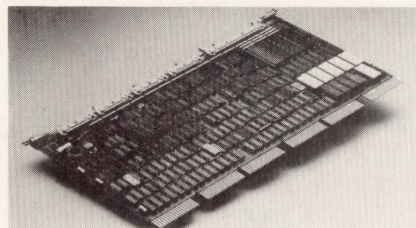## MICROPROGRAM DEVELOPMENT SYSTEM

For high speed emulation of P/ROMs, the DS50 can be configured with RAMs of various sizes. Microprogram debugging capabilities such as break and trace are options. The unit may be loaded and edited via keyboard or RS-232 interface. Cassette drive for load, dump, and verify is optional. Control memory size varies from 1k x 16 to 4k x 64. Currently available RAM speeds range from 20 to 150 ns, with total unit access time down to 34 ns. **Hilevel Technology, Inc,** 14661 Myford Rd, Tustin, CA 92680.
Circle 246 on Inquiry Card

FIBER OPTIC DATA LINK

Both receiver and transmitter of OTD-500 data system are packaged in a 0.5" (1.3-cm) high 24-pin DIP for board to board applications. Transmitter features a driver circuit with GaAs (infrared) LED emitter; the receiver features miniature hybrid construction. TTL compatible Op-Tec Link™ offers max noise immunity through adjustable control. A 5-ft (1.5-m) fiber optic cable is std. Operating voltage is 5 V typ. **Opto Technology, Inc,** 1674 S Wolf Rd, Wheeling, IL 60090.
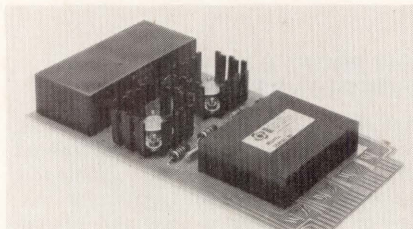Circle 247 on Inquiry Card

SINGLE-BOARD CONTROLLER FOR PDP-11/FOUR DISC DRIVES

Emulating the DEC RM-02 controller, the 3211 controller provides compatible formats and interchangeable media without changes to the software disc driver of the host operating system. Up to 4 SMD type drives in any mix of capacities can be interfaced to a DEC PDP-11 series computer. The host resident controller handles data rates from 806k to 1.2M bytes/s. A 32-bit ECC, overlapping seeks, sector interleaving, and multiple sector transfers are featured. **Ball Computer Products,** 860 E Arques Ave, Sunnyvale, CA 94086.
Circle 248 on Inquiry Card

14-BIT D-S CONVERTER

Driving up to 3 size 11 torque receiver synchros with ±6-min accuracy, the 4.5 x 9.25 x 1" (11.4 x 23.5 x 3-cm), 400-Hz units accept a 14-bit natural binary angle and convert it into 3-wire synchro or 4-wire resolver signals. Output is short circuit protected and current limited. Loading of 5 VA is std. DSC40-PC-L-1 requires a 26-V reference, as well as ±15 V at 375 mA and 5 V at 50 mA. **Computer Conversions Corp,** 6 Dunton Ct, East Northport, NY 11731.
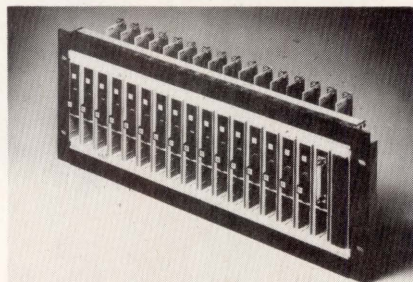

Circle 249 on Inquiry Card

RACK MOUNTABLE INSTRUMENT PRINTER

Model 5019 is a rack mounted OEM version of the 5020 printer. It offers 5 x 7 dot matrix printing of any character set programmed into the character generator P/ROM. Unit prints 32 char/line at up to 2 lines/s. Printing mechanism life time is more than 2×10^6 lines; printhead life is more than 7×10^5. Input may be ASCII or BCD. The 5.22 x 8.39" (13.25 x 21.31 cm) printer fits into almost any instrument application. **Kontron Electronic Inc,** 700 S Claremont St, San Mateo, CA 94402.
Circle 250 on Inquiry Card

CHANNEL SWITCHING MODULES

A/B switches permit switching of the EIA RS-232/CCITT V.24 interface between a modem and 2 terminals (or computer ports). This passive, 1" (2.5-cm) wide modular device has 3 std EIA rear card-edge connectors—1 for the modem and 2 for terminals; 2 color-coded A/B pushbuttons implement the mechanical switching action. Visible several feet away, a color-coded indicator shows the status of the channel switch. **Dynatech Data Systems,** 7644 Dynatech Ct, Springfield, VA 22153.
Circle 251 on Inquiry Card

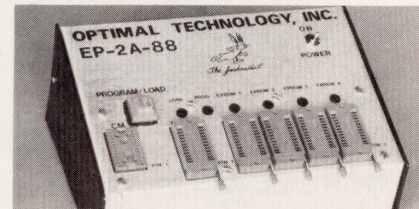## 8.5" RECEIVE ONLY SERIAL PRINTER

Model 877 is a bidirectional 9 x 7 dot matrix printer that features a heavy gauge, hardened metal chassis and stainless steel drive screw and utilizes a cartridge ribbon to eliminate ribbon reversing mechanisms as well as to assure print quality. The unit prints 120 char/s at 80 char/line, 10 char/in (3.9/cm) using the ASCII 95-char set. Internally contained 8.5" (21.6-cm) paper roll is friction fed. **Printer Terminal Communications Corp,** 124 Tenth St, Ramona, CA 92065.
Circle 252 on Inquiry Card

MINIATURE DC-DC POWER CONVERTERS

DCE series of 8 models offers accurate 0.02% max error regulated outputs with low noise, 1 mV rms. High attenuation input filter reduces kickback spikes, noise, and reflected ripple caused by inverter switching. I/O isolation impedance of $10^9 \Omega$ and voltage isolation of 300 Vdc permit separation of the output circuit from the dc bus. Inputs of 5, 12, 15, 24, and 28 Vdc convert to outputs of ±15 and ±12 Vdc at 150-mA output current. **Intronics,** 57 Chapel St, Newton, MA 02158.
Circle 253 on Inquiry Card

EPROM COPIER

A standalone EPROM programmer copies from 1 to 4 1k, 2k, and 4k EPROMs. Model EP-2A-88 offers copy modules for duplicating 2758, 2732, TMS 2508, TMS 2516, 2716, and 2732 EPROMs. A single pushbutton control initiates the complete programming cycle, ensuring that each EPROM is erased, programmed, and verified. Status of the LED indicators is on when the programming is completed, flashing if the EPROM was not erased, and off if the EPROM was erased but did not program. **Optimal Technology, Inc,** Blue Wood 127, Earlysville, VA 22936.
Circle 254 on Inquiry Card