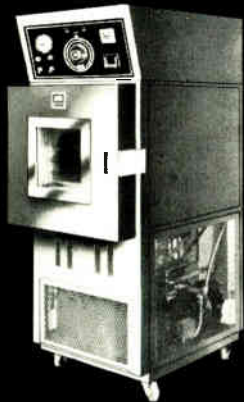


**THE -100°F. TO +400°F.
CHAMBER
WE WON'T
SELL TO
JUST ANYONE**



**(IT'S TOO MUCH UNIT
FOR ORDINARY WORK)**

It's a fact: Blue M Versa-Range Test Chambers are too much unit for run-of-the-mill needs. There are many, cheap, mass-produced chambers that can meet average requirements adequately. *But*, if you have really tough requirements, then consider these Versa-Range facts: They meet your needs because they meet the specifications we quote. When we say -100°F., for example, we mean -100°F. Not -95°F. or -88°F.

Our chart recordings are correct. Our pull down rate of 60 minutes or less to -100°F. is exact at nine points, not just one.

Versa-Range Chambers feature the patented POWER-O-MATIC 60® Proportioning Control for straight-line performance . . . not low-cost, on-off controls.

Blue M's mechanical refrigeration features long lasting continuously operating compressors — not the slam-on, cut-off, cycling type you find in cheaper chambers.

Versa-Range Chambers come with two different ranges in five sizes to 64 cu. ft. Accessories include programming.

If you want fine, reliable performance without a lot of parts failure, costly maintenance, and service calls, a Versa-Range Chamber is your best buy. Send for complete details: Blue M Engineering Company, A Division of Blue M Electric Company, Corporate Headquarters, Blue Island, Illinois 60406.



New products

Chip contains keyboard code

Interchangeable LSI units provide several formats

Versatility and low power drain are features of a data entry keyboard that uses a single LSI/MOS chip for all coding functions. The chip accomplishes up to nine bits and four levels of encoding and, since chips are available in several formats, all that need be done to change from one code to another is to switch to a new chip.

The keyboard, made by Clare-Pendar, a division of General Instrument Corp., employs a scanning technique to search for closure of the dry-reed switch keys. A basic scanning frequency of 50 kilohertz allows a scan rate of 20 microseconds. The clock circuit is contained in the LSI/MOS chip, as is the cir-

cuitry to detect switch closure. The chip also contains a 2,000-bit read-only memory to generate the output code. This is compatible with transistor-transistor logic.

Stephen Meyer, Clare-Pendar marketing manager, says the use of reed switches instead of—for example—Hall-effect keys means a savings in power. "Our keyboard draws 200 milliwatts, while the principal Hall-effect unit on the market draws 5 watts," he states.

The Clare-Pendar keyboard is available with any number of keys up to 88. It's also a three-mode unit—the logic can handle shift, control, and character. Other features are two-key rollover, positive or negative logic, and double shot-molded keys. A strobe that can be programed up to a two-millisecond rate signals valid data and prevents bounce.

Price of the keyboard is about \$250 in small quantities, and is expected to drop below \$100 in production volume.

Clare-Pendar Co., P.O. Box 785, Post Falls, Idaho 83854 [422]

Printer priced under \$6,000

Electrostatic unit operates at 300 lines per minute

Quiet operation is one of the attractions that electrostatic printers have over impact types. Cost and reliability also are desirable factors, says Milton Reid, vice president of marketing at Versatec Inc. His company will introduce at the FJCC an electrostatic printer that will sell for \$5,995.

The machine, designated the Matrix 300, can print at up to 300 lines per minute on fan-fold paper. Contributing to this speed is top-of-the-page formatting. When the job calls for printing on only part of a page, the Matrix 300 can slew to the top of the next page at the equivalent of 1,200 lines per minute.

A speed option on the motor and a photoelectric sensor allow the paper to advance to the next page when a form-feed command is given.

Input to the Matrix 300 is serial or parallel ASCII, accepted synchronously or asynchronously. A read-only memory helps to decode inputs to to 5-by-7-matrix characters, and printout is in 80-character lines on 8½-by-11 fanfold paper.

With no moving parts other than the paper transport, the machine has inherent reliability as well as virtually silent operation, Versatec points out. In addition to applications for computer system printout and for use with display terminals, the machine can be linked to communications lines operating at speeds up to 4,800 baud. Versatec will supply interfaces for most of these applications.

Delivery time is 30 days after receipt of order. Quantity and OEM discounts will be offered.

Versatec Inc., 10100 Bubb Road, Cupertino, Calif. 05014 [423]