The YOUNG 26700 Series Programmable Translator offers a new level of capability in meteorological sensor monitoring.

This microprocessor-based display and data collection device has the features and flexibility to perform many monitoring tasks. From simple display of one variable to multi-sensor datalogging and serial data transmission, the 26700 Programmable Translator can satisfy your measurement needs.

High Resolution Display
The 26700 display is a high contrast, illuminated, alphanumeric L.C.D. Measured data can be displayed in any format that suits the application. Display text is easily customized using the front panel keypad; ten different screens are available.

Data Storage
Built-in memory lets you log up to 24000 data points in real time. Data can be retrieved at any time, communicated to another device such as a personal computer, or output on a dot matrix printer. These capabilities make the 26700 a perfect choice for many network systems.

Wide Selection of Inputs
The 26700 translator accommodates up to 5 specially designed sensor interface modules.

Inputs for wind, temperature, precipitation, humidity, and other sensors are connected to the appropriate module and initialized by selecting a command with the front keypad. Programming is simplified by featuring many special functions such as average, standard deviation, maximum, minimum, sine and cosine, U.V.W. corrections and others. The 26700 is compatible with all YOUNG sensors.

Special Output Functions
Many output options are available for the 26700. The base unit has a standard RS-232 for serial communication via cable, modem or radio transmitter. Special modules are available for Voltage and Current outputs. The Alarm/Relay module provides 4 dry contact switches which can be programmed from the keypad. The Printer Interface module enables the 26700 to output directly to a conventional dot-matrix printer.
Modular Design Provides System Flexibility

Each 26700 is interfaced to the sensors through specially designed sensor interface modules. These modules allow you to optimize performance with different sensor types. Modules are available for a wide variety of inputs and outputs to custom tailor your system. New modules can be installed at any time as requirements change.

Wind Speed/Direction Input

This module accepts inputs from many wind sensors. The signal can be DC voltage or frequency pulse. Excitation voltage is supplied for potentiometer type direction sensors.

Temperature Input

The Temperature Input module has inputs for two platinum RTD sensors. Inputs from 100Ω or 1000Ω sensors are accepted. Special compensating circuitry gives accurate measurement over a wide temperature range.

Voltage Input

Perfect for relative humidity sensors, solar radiation sensors, and bi-directional propeller anemometers, the Voltage Input module offers four input channels. Each channel can be set to measure a DC voltage ranging from a few millivolts to ±5 volts. Channels can be combined to measure differential voltages.

Current Input

For current loop systems, the Current Input module accepts an input signal in the range of 0 to 20 mA (typically 4 to 20 mA). This configuration is well suited for operation over long cable lengths or for industrial applications where electrical noise may be a problem.

Voltage and Current Outputs

A variety of outputs are available to enable the 26700 to perform many important system functions. Each output module is easily configured using the front panel keypad and menus that appear on the display. The Voltage Output module has a high resolution voltage signal that allows operation of chart recorders and other external devices. The Current Output module is useful in many industrial settings where a milliampere signal is desirable.

Alarm/Relay, Printer Interface

The Alarm/Relay module features four dry-contact switches that can be set to activate a warning or initiate an action if specified conditions are met. The Printer Interface provides a convenient way to generate a hard copy record of data and program instructions using only a standard dot-matrix printer.
Specifications:

26700 SERIES PROGRAMMABLE TRANSLATOR
Dimensions: .................................................................3.1 in (79 mm)H x 8.5 in (216 mm)W x 8.8 in (224 mm)D
Weight: .................................................................2.8 lb (1.3 kg) base unit only, .2 lb (0.1 kg) each module
Construction: ..............................................................Aluminum case, thermoplastic front and back panels
Operating temperature: ...............0°C to 50°C
Storage temperature: ...............-30°C to 50°C
Display: .................................................................2 lines x 16 character alpha-numeric LCD with backlight
Power requirement: ...............7-30 VDC 8 W
(AC adapter supplied, UL & CSA listed)
Serial interface: ...............RS-232, 9 pin, 300 to 9600 baud
Memory: .................................................................24,000 data points, battery back-up

Interface Modules:

26725 WIND SPEED/DIRECTION INPUT
Channels: .................................................................3 input
Input Signal: .................................0 to 5 VDC or 0 to 4 KHz*
Excitation: .................................................................5 VDC regulated for WD potentiometer
Accuracy: .................................................................0.1 % (0.05 VDC resolution)

26726 TEMPERATURE INPUT
Channels: .................................................................2 (excitation provided)
Sensor Type: .................................................................Platinum RTD, 100 Ω or 1000 Ω
Accuracy: .................................................................0.01 °C (0.1 °C resolution)

26727 VOLTAGE INPUT
Channels: .................................................................4 single ended or 2 differential
Input Signal: .................................................................± 50 mV, ± 500 mV, ± 5000 mV*
Excitation: .................................................................± 5 VDC, ± 12 VDC regulated, supply
Accuracy: .................................................................0.1 % (0.6 mV resolution)

26728 VOLTAGE OUTPUT
Channels: .................................................................4
Output Signal: .................................................................± 5000 mV*
Accuracy: .................................................................0.1 % (0.02 % resolution)

26729 CURRENT OUTPUT
Channels: .................................................................4
Signal: .................................................................0 to 20 mA*
Accuracy: .................................................................0.1 % (0.001 mA resolution)

26730 ALARM/RELAY
Channels: .................................................................4
Contact Rating: .................................................................5 A resistive, 2 A inductive @ 250 VAC, 30 VDC

26731 PARALLEL PRINTER OUTPUT
Interface: .................................................................standard parallel printer. Includes cable

26732 CURRENT INPUT
Channels: .................................................................4
Input Signal: .................................................................0 to 20 mA*
Excitation: .................................................................24 VDC unregulated
Circuit Accuracy: .................................................................0.1 % (0.006 mA resolution)

* User selected within stated range.

Complies with applicable CE directives.
Specifications subject to change without notice.