Vorne 2000 Series Alphanumeric Displays

ENGAGE PRIMARY DRIVE

Vorne Industries, Inc.

MODEL 2015

2009S
9 mm Serial Buffered Display

2015S
15 mm Serial Buffered Display

2009C
9 mm Parallel Message Display

2015C
15 mm Parallel Message Display

The 2000 Series - Versatile Low Cost Panel Displays

Versatility is often the key to a successful project. That's why our 2000 Series of single-line message displays offers an array of configuration options, allowing you to select the ideal model for each application. A modular design lets you choose from a wide range of enclosure, power supply, and character height options. 2000 Series displays are also designed to save you time, with productivity enhancing features like point-and-click Windows® programming software, easy-to-wire removable terminal blocks, plug in communication cards, and most importantly - straight forward and intuitive operation.

All 2000 Series models feature bright, light emissive vacuum fluorescent displays, eliminating "LCD squint" and providing easy reading at distances of up to 25 feet. 2000S displays interface with a simple serial communication protocol, while 2000C displays interface through an 8 bit parallel port and also include non-volatile message memory.

When you purchase a 2000 Series display, not only do you get a great product, but you also get top notch technical support from engineers who stand ready to assist with your application questions. Exceptional product support, versatile options, and a great price. Try a 2000 Series demo unit and discover why Vorne is your best choice for industrial panel message displays!

Standard Features

- Preferred vacuum fluorescent technology
- 20 alphanumeric characters, full dot matrix
- 2 character heights - up to 15 mm (0.59")
- Viewing distances of 25 feet and beyond
- English/European 128 ASCII character set
- Fixed, flashed and scrolled messages
- 250 non-volatile EEPROM messages (2000C)
- 3.5 to 30 VDC parallel inputs (2000C)

- RS-232 or RS-422/RS-485 com port (2000S)
- 5 baud rates from 300 to 9600 (2000S)
- Multi-drop with 98 discrete addresses (2000S)
- 2 power options - 24 VDC or 120 VAC
- Rugged black anodized aluminum enclosure
- Free Windows® programming software
- Free 30-day demonstration/evaluation units
- Free expert technical support

Pricing

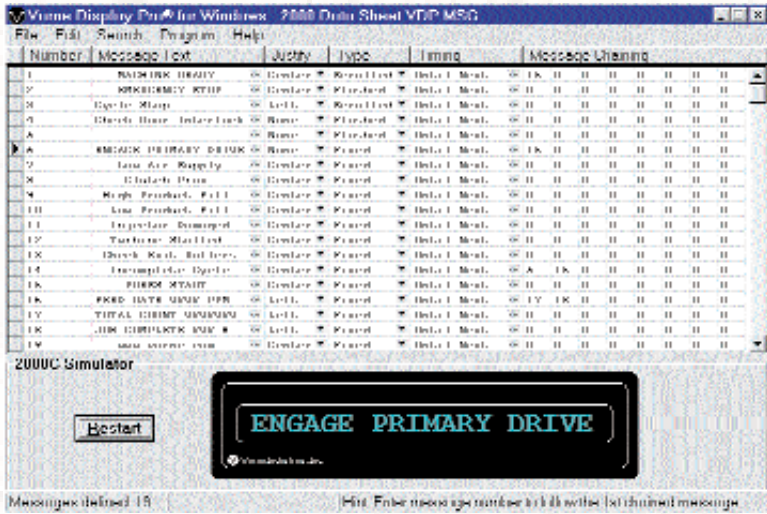|		
- 2000S Series	Serial Input Buffered Displays	$534 to $572 each
- 2000C Series	Parallel Input Message Displays	$662 to $693 each

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Easy-to-use programming software is the perfect complement to a versatile canned message display. Vorne Display-Pro® (VDP) for Windows® allows your ideas to become vibrant messages in a flash. There's even a handy on-screen display simulator to help you visualize and test your messages before loading them into the 2000C Series display. And the software is yours - **free of charge**!

2000S Serial Buffered Displays

It's never been easier to bring your panel to life! 2000S serial displays are *the* easy to use, cost-effective display solution when data is available in a serial RS-232, RS-422, or RS-485 format.

Versatile Communications

With up to 98 unique addresses, and an intuitive ASCII communication protocol, 2000S displays are well suited for both stand alone and multi-drop network applications. A plug-in communications card allows each display to be configured to receive and retransmit RS-232 or RS-422/RS-485 data. Select RS-232 with RS-485 retransmit and your 2000S display is also an RS-232 to RS-485 data converter - a great feature when setting up multi-display networks.

Simple DIP Switch Set Up

Easily accessed DIP switches offer a selection of baud rates (300, 1200, 2400, 4800 or 9600), data bits (7 or 8), stop bits (1 or 2) and parity status (On or Off). The message terminator can also be selected as carriage return <CR>, line feed <LF>, or a combination of both <CR><LF>.

Message Effect Commands

Add impact to your messages with easy to use message effects that are included in the 2000S command set. Flash all or part of a message, scroll messages, or even control the brightness of the display - all with simple ASCII commands.

2000C Canned Message Displays

Powerful messaging doesn't have to be difficult. 2000C message displays are easily interfaced to PLCs through a simple 8-bit parallel input port - making indicator lamps a thing of the past!

Sizable Message Capacity

The 2000C can store up to 250 messages of 20 characters each in EEPROM non-volatile memory - so it never needs a battery. Messages can also be chained together to create extra long messages of up to 180 characters, displayed either by scrolling or alternating lines of text.

Programmable Message Effects

Messages can be fixed, flashed or scrolled and set to time out automatically or to persist until the next message is called up. Up to 8 characters of real time variable data can be displayed per fixed or flashed message, by loading data through the parallel port in a multiplexed BCD format.

Standard Features

Preferred VFD Technology

Nothing compares to the readability, viewing angle and outstanding brightness of a vacuum fluorescent display. VFDs are light emitting displays with excellent contrast, great viewing distance, and long life.

Two Character Heights To Choose From

Character height options include, 9 mm (0.35") and our giant 15 mm (0.59") for crystal clear viewing over a wide range of distances.

Multiple Power Supply Options

Power supply options include 10-30 VDC, and 120 VAC. To simplify wiring, all power and data connections are made to removable connectors

Specifications

Power and Environmental Requirements

2009S or 2009C	3.6 VA
2015S or 2015C	6.8 VA
Operating Temperature Range	0 to 50°C
Humidity (non-condensing)	5% to 95%

Panel Mount Case Dimensions

Model	Character Height	Dimensions (inches)			Panel Cutout
		A	B	C	
2009	0.35"	3.1	10.0	4.6	2.8 X 9.7
2015	0.59"	3.2	13.6	4.6	2.9 X 13.3

2000 Series Family Photo

Viewing Distance

The table below outlines recommended viewing distances for the three available character heights.

Model	Character Height	Recommended Viewing	Maximum Viewing
2009	9 mm (0.35")	Up to 14'	18'
2015	15 mm (0.59")	Up to 24'	32'

How to Order

2000S And 2000C Series Ordering Options

20XXS - A / B - D - E Example: 2015S-232/485-24-C
20XXC - C - D - E Example: 2009C-H-120-C

XX - Character Height (Both Series)
      09 = 9 mm (0.35") character height
      15 = 15 mm (0.59") character height
A - Data Type Received (2000S Series only)
      232 = RS-232
      485 = RS-485 (fully RS-422 compatible)
B - Data Type Retransmitted (2000S Series only)
      232 = RS-232
      485 = RS-485 (fully RS-422 compatible)
C - Parallel Input Type (2000C Series only)
      L = 3.5 to 9 VDC sink or source
      H = 9 to 30 VDC sink or source
D - Operating Voltage (Both Series)
      24 = 10-30 VDC
      120 = 120 VAC
E - Case Options (Both Series)
      C = Panel Mount Case

Pricing

The following prices are for single unit quantities. Volume discounts are available for purchases of 10 units or more.

Options

1/8" Thick Neoprene Panel Gasket	$5

Model #	10-30 Volt DC or 120 Volt AC Full Case
2009S	$534
2015S	$572
2009C	$662
2015C	$693

VDP for Windows® 95/98/NT/2000/XP FREE

FREE Trial Units

2000 Series displays are available for a FREE 30-day trial. We know of no better way to show you the quality of our products and support than to have you experience it for yourself.

For More Information

Call us toll free at 1-888-DISPLAYS (1-888-347-7529) and we will be happy to discuss your application, or send you more information.

Call Today!
1-888-DISPLAYS
1-888-347-7529

Visit us at www.vorne.com