



# RabbitNet™ RN1600

## *Keypad/Display Interface Card*

**\$56 (qty. 100)**

The RabbitNet™ RN1600 Keypad/Display Interface card is the fifth in a series of peripheral I/O cards designed for use with Z-World single-board computers such as the BL2500 Coyote, BL2600 Wolf, and OP7200 eDisplay that have RabbitNet expansion ports. The Keypad/Display Interface card is DIN-rail mountable. The RN1600 provides a simple interface for connecting a wide variety of displays (up to 4 x 20) and keypads (up to 64 keys). The RN1600 provides an inexpensive solution for simple display applications.

## RabbitNet

RabbitNet expansion ports enable a modular and expandable embedded control system whose configuration of expansion cards can be tailored to a large variety of demanding real-time control, display, and data-acquisition applications. A typical RabbitNet system consists of a master single-board computer and one or more peripheral cards. A high-performance Rabbit 3000® or Rabbit 2000® microprocessor on the master provides fast data processing, and the BL2500 and BL2600 masters also provide the DCIN and +5 V power for the peripheral cards.

## Programming RabbitNet Cards

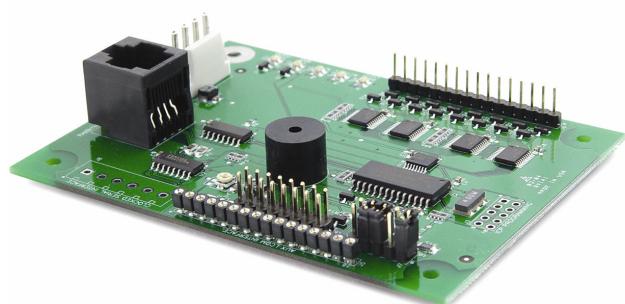
Programs are developed and debugged using Z-World's industry-proven Dynamic C® software, which runs on a Windows PC. The Keypad/Display Interface expansion card is a slave; the master to which RabbitNet peripheral cards are connected is programmed using version 8.01 or later of Z-World's Dynamic C. Dynamic C includes comprehensive debugging support and includes break points, watch expressions, and many other extensive features oriented toward real-time embedded systems programming. An extensive library of drivers and sample programs is provided, including a royalty-free TCP/IP stack for network and Internet communications. Full source code is provided for most library routines. Dynamic C is sold separately.

## RN1600 Expansion Kit

Comes complete with everything you need to jumpstart your Keypad/Display application.

## RN1600 Hardware Features

- Low-cost solution for keypad/display embedded system designs
- Works with multiple keypad arrays and display sizes
- Expansion Kit available for prototype sizing
- 100 mm DIN-rail tray mountable
- RabbitNet interface (RS-422): 1 Megabit per second using standard Ethernet cable, up to 10 m (33 ft) away from master



**RN1600**

RN1600 Keypad/Display Interface Card Specifications & Features	
FEATURE	RN1600
<b>Keypad/Keyboard Interface</b>	Handles one keypad: <ul style="list-style-type: none"><li>• 1 – 64 keys</li><li>• 0.1" spacing on flex cable and Berg series 65801 connector</li></ul>
<b>Liquid Crystal Display Interface</b>	Handles one display: <ul style="list-style-type: none"><li>• 1x8 – 4x20 character display module compatible</li><li>• 2x8 header, and 1x16 socket (both standard)</li><li>• LED backlight support (software on/off control) and contrast adjustment (not software controlled)</li></ul>
<b>RabbitNet™ Serial Port</b>	RS-422, 1 Mbps
<b>Power</b>	5.0 V DC +/- 5%, <60 mA (excluding backlight)
<b>Operating Temp.</b>	-40°C to +85°C (excludes customer supplied LED display)
<b>Humidity</b>	5–95%, noncondensing
<b>Connectors</b>	(1) RJ-45 RabbitNet Connector (1) 0.156" 4-position vertical power header (1) 1x16, 0.1" position vertical header for keypad interface (1) 2x8, 0.1" vertical header for LCDM interface (1) 1x16, 0.1" vertical socket for LCDM interface (optional)
<b>Card Size</b>	2.95" x 3.94" x 0.77" (75 mm x 100 mm x 20 mm) (DIN rail mountable)
<b>Pricing (qty. 1/100)</b> Part Number	\$69/56 101-0879
<b>RN1600 Expansion Kit</b> Part Number	\$149 101-0887

## RN1600 Expansion Kit

- Comes complete with RN1600, 0.156" pitch crimps, connector set (assortment of various headers and sockets of compatible design), cable set, display set (one 4 x 20 LCD, one 2 x 20 LCD), keypad set (1 each: 10 x 4, 3 x 4, 2 x 6, membrane keypads)

