

# U. S. ROBOTICS

## USR-330

### ORIGINATE/AUTO ANSWER MODEM



- 0-300 BAUD DATA RATE
- STAND ALONE UNIT
- INTERFACES: RS232C  
20mA CURRENT LOOP

#### DESCRIPTION

The USR-330 is a hardwire, asynchronous, half/full duplex modem that operates in both the originate and auto answer modes at data rates of up to 300 baud. The design incorporates powerful MOS/LSI integrated circuitry, crystal controlled digital receiver and transmitter and computer designed active filters to produce a reliable, compact and versatile unit. The USR-330 comes with power supply and is housed in a durable and attractive case designed for desk-top display. Connection to voice grade telephone lines is via a standard CBS-1001F Data Access Arrangement (DAA). The USR-330 is available with an EIA RS232C interface, a 20mA current loop interface or both EIA RS232C and 20mA current loop interfaces.

- HALF/FULL DUPLEX
- HARDWIRE CONNECTION  
via CBS-1001F DAA

#### APPLICATION

Installation of a USR-330 means on-line, auto answer capability for your system, from the smallest microcomputer to a system-370. Once connected to the computer and the phone line, the modem will automatically answer incoming calls, placing off-site users in contact with the computer. Terminals, printers and any other data transmission equipment conforming to the standard RS232C or 20mA current loop interfaces can also be connected to the phone lines via the USR-330. The unit provides the benefits of a standard auto answer modem while maintaining the flexibility of the originate mode—all in one convenient package at a price less than answer only devices offered by other manufacturers.

**TECHNICAL SUMMARY**

DATA RATE: 0-300 bps asynchronous  
 MODULATION: Frequency Shift Key (FSK)  
 COMPATIBILITY: WE103 and WE113 series  
 OPERATING MODES: switch selectable—  
                           originate/auto answer  
                           full/half duplex (copy)  
 CARRIER FREQUENCIES:   originate   answer  
     transmit mark           1270       2225  
     transmit space         1070       2025  
     receive mark          2225       1270  
     receive space         2025       1070  
 TRANSMIT LEVEL: -9 dBm (fixed)  
 RECEIVE LEVEL: 0 to -45 dBm  
 DIGITAL INTERFACE: RS232C via 25 pin connector  
                           20mA current loop via 9 pin  
                           connector  
 LINE INTERFACE: via CBS-1001F DAA  
 ABORT DISCONNECT: 17 seconds  
 LOSS OF CARRIER DISCONNECT: 17 seconds  
 POWER REQUIREMENTS: 115 VAC, 60Hz  
 INDICATORS: power on, carrier detect  
 CONSTRUCTION: solid state  
                           crystal controlled  
                           digital, LSI  
                           computer designed active filters  
 CONFIGURATION: stand alone  
 SIZE: 4" x 7" x 10"  
 WEIGHT: 3 lbs.  
 COLOR: black

**DEFINITION OF RS232C CONNECTOR PINS**

1 protective ground  
 2 transmit data, terminal to modem  
 3 receive data, modem to terminal  
 4  
 5 carrier detect  
 6 data set ready  
 7 signal ground  
 8 clear to send  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20 data terminal ready  
 21  
 22 ring indicator  
 23  
 24  
 25

**DEFINITION OF 20mA CURRENT LOOP CONNECTOR PINS**

1 ground  
 2 + terminal to modem  
 3 - terminal to modem  
 4 + modem to terminal  
 5 - modem to terminal  
 6 20mA current sink  
 7 20mA regulated current sink  
 8  
 9

**PRICES**

**USR-330 with RS232C INTERFACE                   \$185.00**  
**USR-330 with 20mA CURRENT LOOP INTERFACE       \$185.00**  
**USR-330 with RS232C and 20mA CURRENT LOOP INTERFACES   \$195.00**

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