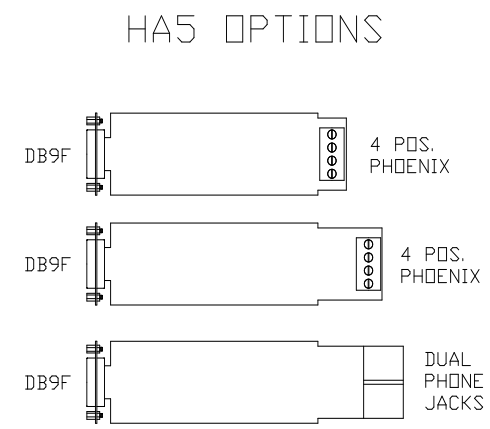
FEATURES

- ASCII command support for all 1-Wire devices.
- RS232 or RS485.
- Parasitically (RS232) or externally powered.
- Automatically adjusts for variable 1-Wire bus conditions.
- Automatically provides smart strong-pull-up for sensors.
- Up to 1000 feet, 100 devices.
- Supports up to 26 1-Wire networks per host serial port.
- User selectable Baud rates from 1200 to 115K Baud.
- User selectable address (1 of 26).
- User selectable error-check mode.
- RS232 version supports Broadcast Radio and Modem applications.
- Built-in DB9 for RS232 or RS485 interface.
- Optional RJ11 or screw-down 1-Wire bus interface connector options.
- Provides Search, Conditional Search and Family Search commands.
- Supports Touch Memory File Structure for iButtons.
- Automatically generates and checks CRC16 for TMEX files.
- Block mode commands support all 1-Wire device functions.
- ESD Protection more than 27kV (IEC801-2 Reference Model.) on the 1-Wire bus.
- Optional enclosure.





DESCRIPTION

The HA5 is an RS232 or RS485 to 1-Wire interface, which provides an ASCII command set for embedded controller and DOS based applications that need to accommodate Dallas Semiconductor iButton and 1-Wire devices. The HA5 relieves the host of the burden of generating the time–critical 1–Wire communication waveforms while supporting all 1-Wire devices with simple ASCII commands that can be easily generated. The HA5 does all the hard work of interfacing 1-Wire networks. RS232 and RS485 versions provide as many as 26 1-Wire networks from a single host serial-port, broadcast radio or modem. The HA5 can perform Search, Conditional search and Family search functions making it easy to acquire the unique 64 bit serial numbers of all connected devices. The HA5 constantly performs a dynamic analysis of the network and adjusts the network timing to allow for variable conditions. This results in good performance with both short and long networks with many or only a few devices attached. Many sensor devices require that extra power be delivered during periods of data conversions (DS1920 and DS1820 temperature sensors for example). The HA5 automatically provides the extra current these devices require with a built in smart strong-pull-up. Dallas Semiconductor iButtons which store data in TMEX Touch Memory File format can be read or written with simple ASCII commands. The HA5 will automatically generate and check the CRC16 error checks from Touch Memory File records. The HA5 supports analog, digital, and temperature 1-Wire devices and all Maxim iButtons.

1-Wire® and iButton® are registered trademarks of Maxim. TMEX™ is a trademark of Maxim.