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FEATURES

- ASCII command support for all 1-Wire devices.
- Powered by RS232 handshake lines.
- Automatic power up and power down.
- Automatically provides smart strong-pull-up.
- 1000 feet, 100 devices per CAT-5 twisted net.
- Search, Family Search and Conditional Search.
- Block mode commands support all 1-Wire device functions.
- Supports Touch Memory File Structure for Dallas Semiconductor iButtons.
- ESD Protection more than 27kV (IEC801-2 Reference Model.) on the 1-Wire bus.
- Automatic CRC16 for TMEX files.
- ABS enclosure.
- Low Cost.



DESCRIPTION

The HA7E is an RS232 to 1-Wire interface in a very small ABS enclosure designed to provide an ASCII command set for RS232 serial hosts that need to accommodate Dallas Semiconductor iButton and 1-Wire devices. The HA7E 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 HA7E does all the hard work of interfacing 1-Wire networks.

Small size and very low power consumption as well automatic power-up and power-down features allow the HA7E to operate in low power and battery operated applications with no need for power control signals from the host device. The only interface signal required is the RS23 level TX, RX, RTS and DTR. When a serial ASCII command is sent the HA7E will wake-up, process the command, send the response and power down. The 1-Wire bus can be left in a powered up or a powered down state while the HA7E is powered down. While in power down mode the HA7E has a very low quiescent current requirement.

The HA7E can perform Search and Family search functions making it easy to acquire the unique 64 bit serial numbers of all connected devices. Many sensor devices require that extra power be delivered during periods of data conversions (DS1920 and DS1820 temperature sensors for example). The HA7E 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 HA7E will automatically generate and check the CRC16 error checks from Touch Memory File records. The HA7E supports analog, digital, and temperature 1-Wire devices and all Dallas Semiconductor iButtons.

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