

FI-30

TTL I/O Interface Card



DESCRIPTION

The FI-30 increases the I/O data rate of the 9830A/B to over 10,000 bytes per second. With this extraordinary gain in speed, innumerable applications unfold for your 9830A/B in testing, data acquisition, and control functions. The FI-30 also provides an extremely fast communications path between two 9830's, allowing the machines to communicate at over 10,000 bytes per second.

In conjunction with the Fast Basic III ROM, the FI-30 will input or output information to or from specified arrays at speeds of over 10,000 bytes per second. Packing or unpacking can be specified at one or two bytes per word. Additionally, the number of bytes to process, the starting subscripts in the named array and optional termination character are all independently specified.

As usual, Infotek has exerted a great deal of effort to make the FI-30 totally compatible in the most minute detail to the conventions of the 9830. Moreover, the design of the FI-30 makes it behave like an HP11202A TTL I/O unit when the special high speed instructions of the Fast Basic III ROM are not used.

The FI-30 can be installed as a direct replacement in existing systems using the 11202A. The FI-30 accepts the 11202A I/O cable assembly without any modification thereby avoiding all the usual difficulties associated with wiring, interfacing and debugging. For new applications, a six foot unterminated cable, option 01, is required.

When the FI-30 is used to establish bidirectional communications between two 9830's, a duplex data adaptor, option 02, automatically establishes the correct control and handshake protocol. This option is implemented in a junction box containing the necessary logic and fitted with 25 pin type D connectors. When bidirectional 9830 communications are intended, the option 01 cable may be obtained appropriately terminated at the factory to mate with the option 02 junction box. The option 01 cable, factory terminated to mate with the junction box, is designated option 03.

An optional 12 foot (366 cm) extension cable terminated to mate with options 02 and 03 is designated option 04.



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INFOTEK FI-30 TTL I/O INTERFACE CARD

SPECIFICATIONS:

Data Input: 8 input lines with low power (S/N 74L04) TTL loads and resistive divider consisting of 1.5K to +5 volts and 2.7K to ground.

Data Output: 8 output lines with open collector TTL-hex inverters (S/N 7406). Logic 1 equals 0 volts, Logic 0 equals +5 volts.

Control Lines: Control (CTL), high to low transition signifies card ready for input or output, (open collector TTL).

Control Bar: (CTL), low to high transition signifies card ready for input or output, (open collector TTL).

Flag: (FLG), return low from device when data accepted (output) or data ready (input) (TTL Schmidt Trigger).

Input/Output: (I/O), signified motive operation (input high or output low) (TTL open collector).

Stop: (STP), low level signified STOP key on calculator depressed, stays low for about 65 milliseconds each time STOP key is depressed. STP forces CTL high when calculator terminates an operation or forces CTL low when calculator terminates an operation, (TTL open collector).

Enable Handshake: (ECH), when connected to ground requires peripheral device to have flag high to indicate device ready or CTL will not be driven low, when left open device not

polled prior to driving CTL low. (Standard TTL input with 10 pull up resistor to +5 volts).

Power: Provided by the 9830A/B.

Temperature: 41° to 113° F (5° to 45° C).

Weight

FI-30: 9.5 oz (270 g)
Option 01: 12.5 oz (355 g)
Option 02: 11.0 oz (312 g)
Option 03: 14 oz (397 g)
Option 04: 21 oz (596 g)

Dimensions

FI-30: 4.06 in. (9.7 cm) wide, 7.37 in. (17.6 cm) long, 0.82 in. (1.96 cm) deep.

Option 01: 72 in. (172.8 cm) long, 0.41 in. (.98 cm) diameter.

Option 02: 3.0 in. (7.2 cm) wide, 4.0 in. (9.6 cm) long; junction box, 1.0 in. (2.4 cm) deep.

Option 03: 72 in. (172.8 cm) long, 0.41 in. (.98 cm) diameter.

Warranty: Fully warranted for 1 year.

Service: Service agreement following warranty period is available.



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