



12889A Hardwired Serial Interface

The HP 12889A Hardwired Serial Interface card enhances the data communication capability of 21MX Series computers. The card enables high-speed, asynchronous, long distance, point-to-point data transfer between two HP 21MX Computers. The interface fits into a single I/O slot of the computer.

Features

- 2.5M bits per second transfer rate up to 1000 feet
- 1.25M bits per second transfer rate up to 2000 feet
- DCPC compatible, DCPC interruptible
- Hardware transmission of an acknowledge word without program interruption
- Programmable error detection
- Call back or line monitoring timer
- Optically isolated reception
- Immediate line turnaround

User programs can utilize the communication capability of the HP 12889A through Assembly Language or high-level I/O requests. To do this, a request is made through a remote or local site. A timed call back and line monitor is built into the card providing an automatic acknowledgment without interrupting the program.

The card operates in any of four modes: program to program, program to DCPC, DCPC to program, DCPC to DCPC. The required word rates are provided by the asynchronous nature of the data transfers.

The cable is isolated at the receiver end by an optically isolated gate permitting NRZ encoding for card to card communication. This enables long distance data transmission with high reliability against errors due to common mode noise or ground level shifting.

A pair of coaxial cables is operated as unidirectional transmission lines for immediate line turnaround.

The HP 12889A has several other features including automatic data acknowledgment or handshaking via hardware; CRC generation, transmission, and processing through hardware; and a six bit hardware address

recognition circuit. The CRC accumulation is a 16-bit feedback shift register that implements a 15th degree CRC polynomial.

Product Specifications

SYSTEM REQUIREMENTS

Ten feet of coaxial cable is included with the interface. Additional cable must be 75 Ω , type RG 59 B/U. Cable connectors must be supplied by the user. See the 12889 Operating and Service Manual for complete information.

POWER REQUIREMENTS

- 0.01A (-2V)
- 2.25A (+5V)
- 0.125A (+12V)
- 0.05A (-12V)

Product Support

EQUIPMENT SUPPLIED

Hardwired Serial Interface kit including one PC board (12889-60001), hood and cable assembly (12889-60003).

SOFTWARE SUPPLIED

- Interface Diagnostic (24335-16001)
- Option 421: DOS-III Physical Driver, DVR 67 (24341-16001)
- Option 422: RTE Driver, DVR 67 (24341-16002)

DOCUMENTATION SUPPLIED

- Operating & Service Manual (12889-90001)
- Option 421 & 422: Driver Manual (12889-90007)

ORDERING INFORMATION

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|-----------|---|
| HP 12889A | Hardwired Serial Interface Kit. Data transfer speed of 2.5M bits per second at distances up to 1000 feet. |
| -001 | Data Transfer rate of 1.25M bits per second at distances up to 2000 feet. |
| -421 | Add DOS-III Physical Driver, DVR 67 |
| -422 | Add RTE Driver, DVR 67 |





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Sales and service from 172 offices in 65 countries.
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