

Ether6

- **TCP/IP, DOS & Flash File System**
- **386 Ex, 25 MHz / 512K Flash, 1MB SRAM**
- **10BASE-T Ethernet (NE2000 Compatible)**
- **Six PC Compatible Serial Ports**
 - 4 - RS232, 5 wire (Tx, Rx, RTS, CTS, GND)
16 byte Rx and Tx FIFO, Unique Interrupts
 - 1 - RS232, 7 wire (Tx, Rx, RTS, CTS, DSR, DCD, GND)
 - 1 - RS232 (3 wire) / RS485, Software Selectable
- **Watchdog Timer & Hardware Clock/Calendar**
- **Rugged Aluminium Enclosure**
- **Dimensions 8.30" x 6.76" x 2.28"**
- **7 to 34 VDC, 3 Watts nominal**
- **Expansion port for use with peripheral boards**
- **Optional Cermetek 33Kbaud Modem and 10BASE-2**
- **32 Pin Dip Socket to accept M-Systems DiskOnChip**



89-0073
Ether6-M2

Ideal for applications requiring multiple serial ports, Ethernet connectivity and control, the **Ether6** packs a DOS based computer, 10BASE-T, six serial ports and many other features into a rugged, aluminum enclosure.

Based on the powerful Intel 386Ex processor, the **Ether6** builds on JK microsystems solid foundation of robust embedded microcomputers with Ethernet connectivity. PC compatible serial ports with unique interrupts and FIFO's increase data throughput. Onboard NE2000 compatible Ethernet connects directly to existing networks.

The serial ports, counter/timers, and interrupt controller are fully compatible with the IBM PC at both the hardware and software levels. The DOS operating system allows software design and debugging in a familiar environment. The **Ether6** also features a socket for additional storage using M-Systems DiskOnChip products, the capability of integrating a on board modem module, and is also compatible with JK microsystems integrated peripheral boards.

Additional features such as the watchdog timer, RS485 serial port capability, on board voltage regulation and JK microsystems aggressive pricing, make the **Ether6** ideal for many embedded designs.

The **Ether6 Development Kit** (99-0070) includes an **Ether6** with enclosure, Programming Cable, Connector Kit, Ethernet Cables, 110 VAC Adapter, Setup Guide, Schematic, and CD with Borland C/C++ V4.52 Compiler, utilities, sample programs and documentation.

The **Ether6-M2 Development Kit** (99-0073) includes everything in **Ether6 Development Kit** (99-0070), but **Ether6** has 33Kbaud modem and 10BASE-2 upgrades preinstalled.

Also included are sample programs and source code for the TCP/IP stack and web server that can be compiled with the Borland C/C++ package. 220Vin to 110V transformer (70-0006) also available.

JK microsystems, Inc.

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Ether6

Specifications

Processor	Intel 386Ex, 25Mhz
Operating System	XDOS (MS/PC DOS 3.3 compatible)
Memory	1Meg SRAM, 512K Flash
Ethernet	10BASE-T NE2000 compatible, automatic media detection, Link status and Activity LEDs
Serial Port 1	RS-232 with 5 handshake lines COM1, address 0x3F8, IRQ 4 115200 baud maximum
Serial Port 2	RS-232 (no handshaking) or RS-485 half duplex, COM2, address 0x2F8, IRQ 3 115200 baud maximum
Serial Ports 3-6	RS-232 with 2 handshake lines, 16554 UART, COM3-6, 115200 baud maximum, 16 byte Rx and Tx FIFO
Digital I/O	5 Bits (P1.4-P1.7, P3.1) Pin configurable as input or output 8mA source/sink
Watchdog	Hardware, 1.6 second timeout Generates board wide reset
Clock/Calendar	Hardware, battery backup
Supply Voltage	7-34 V unregulated DC
Supply Power	3 Watts

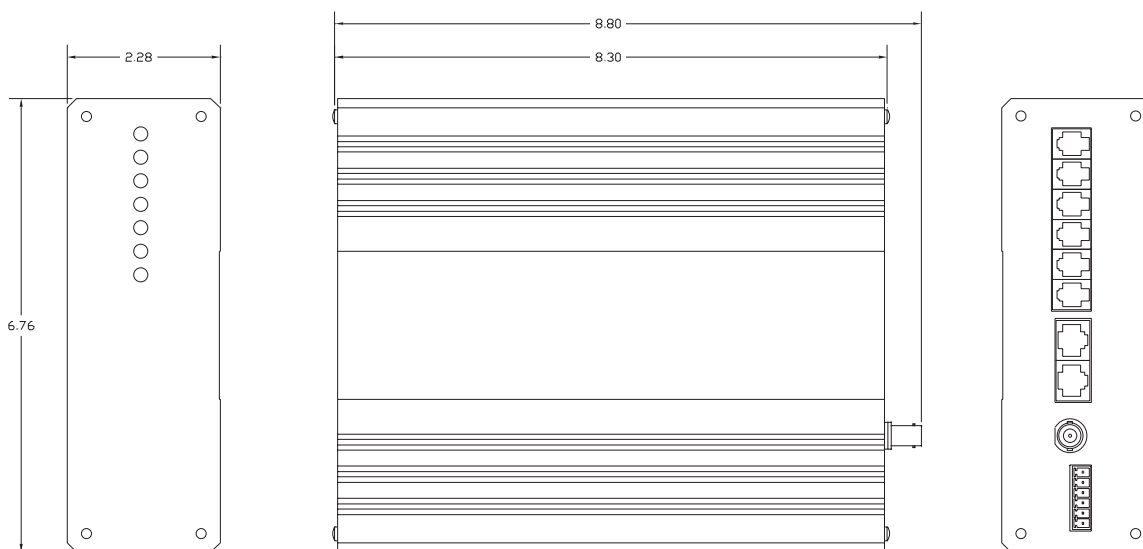
Humidity	5 - 90%, non-condensing
Temperature	-4 to 158°F (-20 to +70 °C)
Weight	53 oz (1.5 kg)
Dimensions	8.30" x 6.76" x 2.28" (210.8mm x 171.7mm x 57.9mm)

Connectors and Jumpers

J1	Power, RS-485, CTL input
J2	Multi-I/O Bus (General I/O)
J4	COM1
J5	10BASE-T Ethernet
J6	COM2 (Console) - COM6, TelCo Line
J8-9	Processor Bus
JP1	RS-485 Termination
JP2	Processor Watchdog NMI Enable
JP3	Hardware Watchdog Enable
JP4	Boot Memory Location

Optional Features

- M-Systems DiskOnChip Flash Disk
- Peripheral boards for I/O expansion
- Cermetek 33Kbaud Modem Module
- 10BASE-2 Ethernet



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