



CARRIERBOARD PYXIS-MM

GPS RECEIVER AND MODEM CARRIER BOARD



- ◆ PC/104 carrier board for GPS receiver and landline modem module
- ◆ Compatible with:
 - Trimble Lassen SKII 8-ch. GPS receiver module
 - MultiTech SocketModem family of embedded modem modules
- ◆ Built-in TTL serial-to-PC/104 bus interface
- ◆ Built-in land-line telephone interface circuit
- ◆ -40 to +85°C operation

MODEM FEATURES

- ◆ 2400 baud to 56K baud data rates
- ◆ Worldwide approvals
- ◆ Bluetooth v1.2 available

GPS FEATURES

- ◆ TSIP, TAIP, and NMEA protocols
- ◆ Differential measurement capability
- ◆ Compatible with popular mapping software
- ◆ Backup battery connection to maintain GPS almanac



Model PXMM-GPS-XT with GPS receiver installed.

Pyxis-MM enables you to install a Trimble Navigation GPS receiver module and the SocketModem family of embeddable modem modules from MultiTech Systems onto a PC/104 system. Use it to provide location identification and communications features for vehicle-based embedded systems such as vehicle tracking, navigation, or precision farming. Or use it to communicate via land-line telephone connection to remote equipment such as weather stations or oil & gas wells.

You can install a GPS receiver module alone, any one SocketModem module alone, or a GPS receiver plus a modem module. Pyxis-MM includes all the necessary I/O circuitry to interface the selected modules onto the PC/104 bus, including serial ports, power supplies, and land-line telephone interface. A backup power connector is provided to maintain GPS almanac and minimize time to first fix. The board runs on +5V and operates over -40 to +85°C.

Model PXMM-XT is the carrier board alone. Add your own GPS and/or SocketModem modules.

Model PXMM-GPS-XT is the carrier board with Lassen SKII GPS receiver installed. A SocketModem can be added to the board.



Trimble Navigation Lassen SKII GPS Module

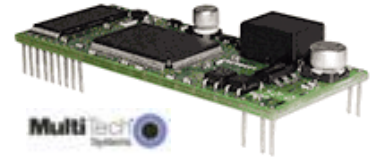
This is the same GPS receiver used in BMW's navigation system. It provides 8 channels of reception and features a quick 2 second reacquisition time. It communicates with the host CPU over either 1 or 2 RS-232 ports built onto the Pyxis-MM carrier board. The dual-channel interface enables differential GPS measurements with the input of a differential receiver signal.

The Lassen SKII supports industry-standard TSIP, TAIP, and NMEA protocols and is compatible with popular mapping and navigation software. Protocol and baud rate are user-programmable. Operating power is less than 0.5 watt, and operating temperature is -40 to +85°C. Applet software is provided for programming the module and viewing real-time GPS data. See www.trimble.com for more information.

ORDERING GUIDE

- PXMM-GPS-XT** Pyxis-MM carrier board with GPS receiver installed
- PXMM-XT** Pyxis-MM basic carrier board

For cables and accessories, see pages 46-47.



MultiTech SocketModem Modules

The SocketModems are a family of miniature modem modules, all with identical footprints, that provide landline modem and Bluetooth communications. Their universal socket interface lets you select the model just right for each application without any changes to hardware or software design. Each modem is a complete solution with built-in DAA (data access interface), controller, and memory. They are available in multiple versions to fit almost any application:

- ◆ Modems feature V.22bis (2400 baud) up to v.92 (56Kbaud) data rates
- ◆ Bluetooth wireless communications with 100 meter range
- ◆ Worldwide approvals
- ◆ 0 to +70°C and -40 to +85°C temperature ranges

All SocketModems use the standard AT command set. They include non-volatile RAM to store user settings and phone numbers, and low power consumption of 1.3W (typical). The modem installs onto the carrier board and locks in place with a snap-fit standoff. It utilizes a standard RS-232 circuit and RJ-11 telephone jack with telephone line interface built onto the Pyxis-MM carrier board.

Some MultiTech SocketModems modules compatible with Pyxis-MM are listed below (see www.multitech.com for complete details and ordering information):

- MT5634SMI-92** V.92 (56K) data/fax modem, commercial temp range, global approvals
- MT5634SMI-ITP-92** V.92 (56K) data/fax modem, industrial temp range, global approvals
- MT5600SMI-34** V.34 (33.6K) data/fax modem, global approvals
- MT5600SMI-32** V.32bis (14.4K) data/fax modem, global approvals
- MT2456SMI-22** V.22bis (2400) data modem, global approvals
- MTS2BTSMI** Bluetooth V1.2 interface with 100 meter range