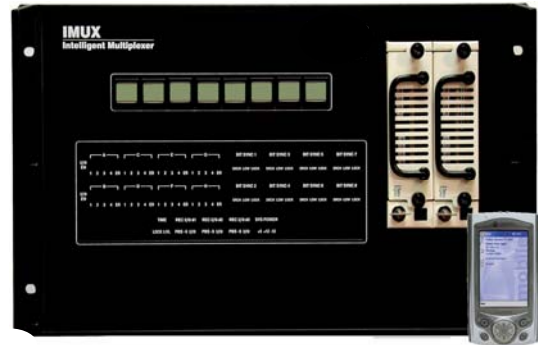


**IMUX Chassis, Touch Button Interface  
IMUXr-101****Features**

- Single enclosure range recording solution with support for multiple RS-232, PCM to 30 Mbps, and Analog to 25 Msps
- Up to 250 channels, full multispeed record/reproduce
- One Gigabit Backplane
- Automated variable rate-matching data channel I/O
- Dual on-board removable or internal disk recording drives
- Integrated tape import/export backup system
- LCD “smart key” push-button operator interface
- In-field set-up creation using a Pocket PC
- Network compatible—system control, administration, and data distribution
- Companion OMEGA™ Real-time processing software
- Desktop PC “soft demux/decom” playback software
- “Read-After-Write” data verification and check-out mode
- Compatible with all existing IMUX family products



The IMUX Recorder (*IMUXr*) is our company's newest addition to the widely used IMUX family of recording products. Created to better serve range and field data collection site operations, the IMUXr is a self-contained, single enclosure solution to today's requirements for smart technology data recording products. *IMUXr* builds on technology developed and fielded in hundreds of IMUX recording system applications featuring transparent interfaces to the latest generation of commercial recording (disk, tape, solid state, and RAID), communications, and network devices. *IMUXr* is a data-recording product designed expressly to meet the requirements of facilities and data acquisition platforms that are searching for the key to bridging today's high performance commercial storage technologies with existing legacy test range and space operations equipment and interfaces.

In addition to acting as the ideal intelligent replacement for yesterday's analog recorders and first generation digital recording equipment, *IMUXr* is also designed to communicate data over network and commercial telecom interfaces. It even records 10/100 BASE-T Ethernet as a time coherent data channel. IMUX provides variable rate record and reproduce support for up to 250 channels of today's most common legacy ground and vehicle data interfaces. This includes PCM, Wideband Analog, MIL-STD-1553, ARINC-429 and -629, 32-bit parallel data, RS-232/422, 10/100 BASE-T Ethernet, IRIG A/B/G time, and voice (in analog or CVSD format).

Implemented using a scalable architecture with an ultrahigh-speed, VME-compatible bus structure, the **IMUXr** recording solution provides over 512 Mbps total recording bandwidth to both internal and companion **external** commercial data recording media. Internal removable disk drives of up to 140 GB each in capacity and over 500 Mbps in aggregate rate each are a common choice of media.

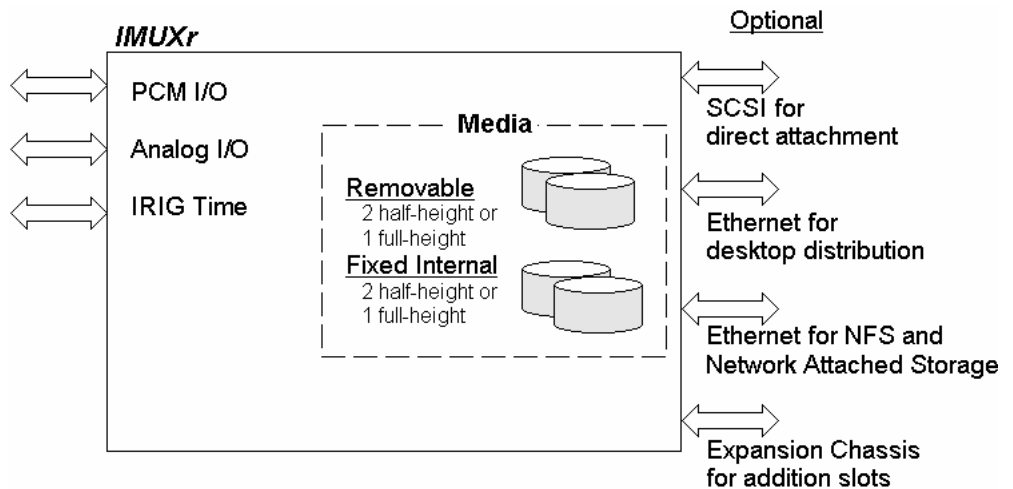
An on-board tape, such as to a DLT, magneto-optical (MO) disk, AIT, or 8mm, is available to accommodate permanent archival storage and data export. **IMUXr** has provisions to support externally attached, very high performance recording devices such as high capacity (multiple terabyte) RAID, high-capacity multidrive jukebox tape, and optical back-up devices, which enables immediate expansion for missions requiring multi-terabyte on-line data recording capacities and the full 512 Mbps recording rate of the **IMUXr**.

Key to the **IMUXr** is its unique and intuitive push-button “smart key” operator interface that consists of programmable pushbuttons, each with its own miniature LCD window display capability. These multimode smart key windows provide the **IMUXr** with a simple and effective stand-alone operator interface, which comfortably sustains all normal stand-alone recorder control, set-up, and status reporting operations. Channel setup and local operator support is also extending through the use of a companion Pocket PC Additional operator status and system administrative support is available through RS-232 and Ethernet interfaced Windows® and UNIX® workstation software applications including powerful companion OMEGA networking, demultiplex, and processing software products.

Our company has fielded hundreds of IMUX recording products that support a wide variety of applications, including satellite operations, space launch and range data recording and communications, mobile weapons test data acquisition, and on-board, fixed-wing aircraft integrated data recording and PC based analysis. Call today for the complete details of applications and configurations to meet your demanding environment.

**IMUXr** is a completely self-contained recording system, supporting internal, external, and network-based recording and archiving solutions.

**IMUXr** packages come standard for range support with eight 30 Mbps PCM channels, eight 20 Msps analog channels, and input/output for IRIG A, B, and G time tagging with one microsecond timing resolution. For range computer support, standard packages come with 32 RS-232 inputs and outputs, 8 input and output analog channels, plus IRIG A, B, and G time support.



Completely self-contained recording system, with expandability to full data processing and network attached storage.

|                          |  |   |
|--------------------------|--|---|
| <b>System Parameters</b> | Signal Types                                       | <p><b>Range IMUXr</b> includes as a standard product solution:</p> <ul style="list-style-type: none"> <li>• 8 channels of 50 Mbps PCM</li> <li>• 8 channels of 20 Msps analog</li> <li>• IRIG A, B, and G.</li> </ul> <p><b>Computer IMUXr</b> includes:</p> <ul style="list-style-type: none"> <li>• 32 channels of RS-232</li> <li>• 8 channels of analog</li> <li>• IRIG A, B, and G</li> </ul> <p><b>IMUXr</b> is expandable to support:</p> <ul style="list-style-type: none"> <li>• additional PCM serial streams</li> <li>• additional analog streams</li> <li>• PCM decoms to 30 Mbps</li> <li>• dual-redundant MIL-STD-1553</li> <li>• both ARINC-429 and ARINC-629</li> <li>• Parallel input, both internally or externally clocked</li> <li>• Both analog and CVSD Voice</li> <li>• 10 Mbps and 100 Mbps Ethernet</li> <li>• Computer serial ports (both RS-232 and RS-422)</li> </ul> |
|                          | System Throughput                                  | 512 Mbps composite  |
|                          | Functions Supported                                | Record (redundant or continuous), Playback, Signal Digitizing and reproduction, Channel Mapping, Session Dubbing, Media Load/Unload/Formatting, Error Listing/Acknowledgement, Built-in Testing, Session Fast Forward and Rewind, recall of nonvolatile preset system configurations  |
|                          | Drives Supported<br><i>Front Panel (Internal)</i>  | To two independent, removable high-capacity magnetic disk and a single high-capacity digital tape device  |
|                          | Drives Supported<br><i>Internal &amp; External</i> | To six independent devices—RAID, MO disk, removable magnetic disk, digital tape, solid state, or other SCSI/FibreChannel interfaced media   |
|                          | Network  | 10/100 BASE-T Ethernet; standard (data and/or control)  |
|                          | Control  | RS-232 Serial, Ethernet, Front Panel LCD smart-key control panel, IR interfaced Pocket PC PDA terminal (included with each <b>IMUXr</b> )   |
|                          | Remote Software                                    | <p>Control/setup:</p> <ul style="list-style-type: none"> <li>• IMUX™ UNIX Control Panel for SGI, Sun, and HP environments</li> <li>• IMUX™ Windows Control Panel for NT, Windows-2000, and Windows XP</li> <li>• Command Line Interface</li> </ul> <p>Data processing software:</p> <ul style="list-style-type: none"> <li>• OMEGA-SERV™</li> <li>• OMEGA-THIN™ and OMEGA-THICK Clients,</li> <li>• OMEGA-FILE™ for direct media processing</li> </ul>  |

|                        |   |   |                         |                       |
|------------------------|---|---|-------------------------|-----------------------|
| <b>Recording Media</b> | Internal Removable Disk                             | 36 GB to 140 GB storage capacity  |                         |                       |
|                        | Internal Tape                                       | AIT, 8mm, DLT (specs per media type)  |                         |                       |
|                        | External Media                                      | RAID, MO disk, CD/RW, DVD, high-rate digital tape, solid state (specs per media type) |                         |                       |
| <b>Environmental</b>   | Ambient Temperature                                 | Operating: 0 °C to +55 °C; Storage: -20 °C to +85 °C                                  |                         |                       |
|                        | Relative Humidity                                   | 5 to 90% noncondensing (operating and storage)  |                         |                       |
|                        | Altitude  | Operating: -200 to 10,000 ft, Storage: -200 to 40,000 feet                            |                         |                       |
|                        | Vibration   | Operating: 1.5 grms 5 Hz to 2000 Hz Random  |                         |                       |
| <b>Physical</b>        | Dimensions  | 19-inch EIA rack-mountable, 10½-inch panel height, 21¾-inch depth                     |                         |                       |
|                        | Air Flow  | ~ 200 CFM left side; exhaust right side   |                         |                       |
|                        | Weight  | 50 lbs typical; 70 lbs max shipping weight  |                         |                       |
| <b>Electrical</b>      | Power   | Auto-switching: 115/230 VAC, 47 to 63 Hz  |                         |                       |
|                        | Power Consumption                                   | 300 Watts Typical, 115 VAC  |                         |                       |
|                        | Grounding   | External ground point provided on rear panel  |                         |                       |
| <b>Ordering Codes</b>  | IMUXr-101-1abcd Touch Button IMUX Chassis, Range    |   |                         |                       |
|                        | IMUXr-101-2abcd Touch Button IMUX Chassis, Computer |   |                         |                       |
|                        | A=Slot 1 (removable)                                | B=Slot 2 (removable)  | C=Slot 3                | D=Slot 4              |
|                        | 0 = none  | 0 = none  | 0 = none                | 0 = none              |
|                        | 1 = 36 GB   | 1 = 36 GB   | 1 = 36 GB (internal)    | 1 = 36 GB (internal)  |
|                        | 2 = 72 GB   | 2 = 72 GB   | 2 = 72 GB (internal)    | 2 = 72 GB (internal)  |
|                        | 3 = 140 GB  | 3 = 140 GB  | 3 = 140 GB (internal)   | 3 = 140 GB (internal) |
|                        | 4 =   | 4 =   | 4 =                     | 4 =                   |
|                        | 5 =   | 5 =   | 5 =                     | 5 =                   |
|                        | 6 = MO  | 6 = MO  | 6 = DDS-3 (front panel) |                       |
|                        | 7 = DLT-8000  | 7 =   | 7 =                     |                       |
|                        | 8 = SDLT-220  | 8 =   | 8 =                     |                       |
|                        | 9 = AIT-3   | 9 = AIT-3   | 9 = AIT-3               |                       |
|                        | A = Mammoth-2                                       | A = Mammoth-2   |                         |                       |
| B = DVD                | B = DVD   |   |                         |                       |