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**Data Sheet**

August 2, 2026

ASTRONICS / EADS / RACAL

## Astronics / EADS / Racal 405094 Enhanced Monitoring System (EMS) Module

Astronics / EADS / Racal 405094 Enhanced Monitoring System (EMS) Module The Astronics / EADS / Racal 405094 is the spare/replacement Enhanced Monitoring System (EMS) module for the Racal Instruments 1261B 13-slot high-performance C-size VXI mainframe. EMS provides interactive chassis monitoring over the VXIbus and an RS-232 port, beyond the Standard Monitoring System (SMS, P/N 405092). It monitors VXI voltages and currents, slot temperatures, fan speeds, and selected backplane signals; supports user limits and interrupts on out-of-limit conditions; and adds TTL trigger I/O with programmable delay for external instrument handshake. The EMS installs in the dedicated rear monitor location, uses its own independent power rail, and consumes no VXI instrument slots. The Astronics / EADS / Racal 405094 is the spare/replacement Enhanced Monitoring System (EMS) module for the Racal Instruments 1261B 13-slot high-performance C-size VXI mainframe. EMS provides interactive chassis monitoring over the VXIbus and an RS-232 port, beyond the Standard Monitoring System (SMS, P/N 405092). It monitors VXI voltages and currents, slot temperatures, fan speeds, and selected backplane signals; supports user limits and interrupts on out-of-limit conditions; and adds TTL trigger I/O with programmable delay for external instrument handshake. The EMS installs in the dedicated rear monitor location, uses

**MODEL****Astronics / EADS /  
Racal 405094****CALIBRATION****Available on  
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****405094****LISTING**[https://aumictechlabs.c  
om/products/405094-  
2/](https://aumictechlabs.com/products/405094-2/)

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## This unit

The Astronics/EADS/Racal 405094 Enhanced Monitoring System (EMS) Module augments VXI mainframe monitoring capabilities with advanced data acquisition, analysis, and fault detection. Designed for integration with the Racal 1261B 13-Slot VXI Mainframe, the EMS module operates on its own independent power rail and consumes no VXI slots, preserving system resource efficiency. It extends monitoring beyond basic SMS functionality through interactive interfaces over VXIbus and RS-232, define custom limits, set maintenance intervals, and generate interrupts upon out-of-limit detection. Technical Specifications Manufacturer: Astronics/EADS/Racal Model: 405094 Product Type: Enhanced Monitoring System (EMS) Module VXI Compliance: VXIbus specification Rev. 2.0 and VXIplug&play Interfaces: VXIbus and RS-232 Power Architecture: Independent power rail; zero VXI slot consumption Key Features Interactive monitoring over VXIbus and RS-232 interfaces User-definable custom limits and maintenance intervals Automatic interrupt generation for out-of-limit conditions Advanced triggering circuit for external VXI trigger synchronization Programmable delay circuit for handshaking with external instrumentation Front panel alphanumeric display for operator feedback Individual VXIbus voltage status monitoring per slot Temperature rise monitoring for each slot Plug-and-play drivers with Soft Front Panel software Typical Applications The EMS module addresses critical system oversight and rapid fault detection in VXI-based test and measurement environments where real-time monitoring, custom threshold management, and synchronized external instrumentation control are required. Compatibility & Integration Designed as a dedicated accessory for the Racal 1261B 13-Slot VXI Mainframe, the EMS module integrates without consuming valuable VXI slots. Full compatibility with VXIbus and VXIplug&play specifications ensures seamless operation within standard VXI ecosystems.

## Features & description

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From manufacturer datasheet

### Features

- Enhanced Monitoring System module for Racal 1261B VXI mainframe
- Monitors voltages, currents, temperatures, fan speeds, selected VXI signals
- User-settable limits with interrupt on out-of-limit events
- VXIbus message-based interface and RS-232 port
- Soft Front Panel / VXIplug&play drivers (family documentation)
- TTL trigger in/out with programmable delay
- Independent EMS power rail; no VXI slot consumed
- Replaces SMS (405092) when EMS capability is required
- Ordering: 405094

Spare EMS Module

## 405094 Characteristics / Specifications

| PARAMETER            | VALUE                                                                                                                                                                                                                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                | 405094                                                                                                                                                                                                                                                                                                                                            |
| Manufacturer         | Astronics Test Systems / EADS / Racal Instruments                                                                                                                                                                                                                                                                                                 |
| Instrument Type      | Enhanced Monitoring System module (1261B accessory)                                                                                                                                                                                                                                                                                               |
| Host Chassis         | Racal Instruments 1261B (and EMS-equipped configurations)                                                                                                                                                                                                                                                                                         |
| Interfaces           | VXIbus (message-based SCPI class); RS-232                                                                                                                                                                                                                                                                                                         |
| Monitored Parameters | VXI power rails (V/I); slot temperatures; fan speeds; selected backplane signals (AS*, ACFAIL*, SYSRESET* class); BERR*/IACK event counting class                                                                                                                                                                                                 |
| Triggers             | TTL trigger I/O with programmable delay                                                                                                                                                                                                                                                                                                           |
| Logical Address      | factory default typically LA 13 decimal when shipped with EMS (confirm switch setting)                                                                                                                                                                                                                                                            |
| Related              | SMS spare 405092; fan module 407375; power supply 407377-910<br>Standard Operating Conditions Install only in the designated 1261B EMS/SMS rear monitor position per the 1261B user manual. Set logical address and cabling before applying power. Use SCPI/Soft Front Panel limits appropriate to the installed power and cooling configuration. |
| Ordering             | 405094 Spare EMS Module                                                                                                                                                                                                                                                                                                                           |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

performance C-size VXI mainframe. EMS provides interactive chassis monitoring over the VXIbus and an RS-232 port, beyond the Standard Monitoring System (SMS, P/N 405092). It monitors VXI voltages and currents, slot temperatures, fan speeds, and selected backplane signals; supports user limits and interrupts on out-of-limit conditions; and adds TTL trigger I/O with programmable delay for external instrument handshake. The EMS installs in the dedicated rear monitor location, uses its own independent power rail, and consumes no VXI instrument slots.

Applications

1261B mainframe health monitoring; programmable limit alarms and interrupts; RS-232 and VXI Soft Front Panel interaction; external trigger synchronization with the chassis; spare EMS replacement (ordering 405094).

Key Features

- Enhanced Monitoring System module for Racal 1261B VXI mainframe
- Monitors voltages, currents, temperatures, fan speeds, selected VXI signals
- User-settable limits with interrupt on out-of-limit events
- VXIbus message-based interface and RS-232 port
- Soft Front Panel / VXIplug&play drivers (family documentation)
- TTL trigger in/out with programmable delay
- Independent EMS power rail; no VXI slot consumed
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- Ordering: 405094 Spare EMS Module

Technical Specifications

### Technical Specifications

| PARAMETER            | VALUE                                                                                                                                             |
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| Model                | 405094                                                                                                                                            |
| Manufacturer         | Astronics Test Systems / EADS / Racal Instruments                                                                                                 |
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| Related              | SMS spare 405092; fan module 407375; power supply 407377-910                                                                                      |

Standard Operating Conditions

Install only in the designated 1261B EMS/SMS rear monitor position per the 1261B user manual. Set logical address and cabling before applying power. Use SCPI/Soft Front Panel limits appropriate to the installed power and cooling configuration.

Operational Notes

405094 is an EMS spare for the 1261B-notageneral-purpose VXI instrument slot module. Confirm SMS vs EMS faceplate/firmware before expecting RS-232/VXI interactive features.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.