



SOUTHWEST RESEARCH INSTITUTE



# RENEGADE-30

## Modular PATS Model 30/35 Replacement

For more than 25 years, Southwest Research Institute® (SwRI®) has provided support equipment development services to the U.S. Air Force. Since 1999, the Avionics and Support Systems Department has supported A-10 auxiliary equipment and developed the A-10 Portable Automated Test Station (PATS) baseline.

SwRI has developed multiple rugged computer systems for the USAF that have successfully met MIL-STD-810 and MIL-PRF-28800 requirements. SwRI has in-house environmental and electromagnetic imaging (EMI) testing environments operated by experienced staff familiar with the rigors of military ruggedness testing.

The Renegade-30, designed by SwRI for long service life, is not limited by the availability of any particular module. The unit features passive cooling, which allows uninterrupted function in inclement weather including wet and dusty environments. The optional slim form factor can be built to meet high-portability niche applications.

### Features

#### Maintenance and Diagnostics Capabilities

- 28 VDC and 115 VAC 400 Hz sense and measurement
- LRU OFP upload and checksum
- Avionics bus data monitoring and diagnostics
- Weapon station checkout and diagnostics
- Tail number tracking and report generation
- Gigabit Ethernet connectivity
- Umbilical cable testing
- Rainproof enclosure
- AC/DC operation

#### Compatibility

- PATS-30 compatible core system
- Software compatible with Suite 7B OTP
- Backward-compatible with all PATS Model 30 peripherals including cable sets and MicroCID cartridge



Renegade-30 rugged flight line tester

#### Modular Design

- Unit assembled using COTS modules
- Each module interfaced to the next using standardized bus architecture
- Modules can be upgraded or substituted without major redesign

#### Reduced Maintenance Cost and Downtime

- Embedded cable management system (ECMS) simplifies internal cable routing
- Faster servicing of modules
- Improved overall system reliability
- Quick replacement of damaged modules

#### Power Flexibility

- Designed to operate from 9 VDC to 40 VDC without external regulation
- Optional AC power interface for 50 Hz, 60 Hz, or 400 Hz bench power

## System Specifications

Processor: Intel® Atom™ 1.8 GHz dual core  
Memory: 2 GB DDR3-800  
Storage: 4 GB solid state  
Network: 4x Ethernet gigabit MB/s  
1x Ethernet gigabit console port  
4x MIL-STD-1553 BC/RT  
I/O: RS-232, 2x USB 2.0,  
optional 1x RS-422/485,  
MicroCID SCSI interface, power,  
diagnostic, PATS J16  
Software: MS Windows® XP, A-10 OTP  
Power: 9 VDC to 40 VDC up to 50W autosensing  
50 Hz, 60 Hz, or 400 Hz AC supplies available

## Environmental Specifications

Temp: -40° to 70°C operational  
-40° to 80°C storage  
Passive cooling  
Humidity: 90% non-condensing at 60°C



Military-grade connectors and environmentally sealed construction

## Ordering Information

Part Number: 20131100-10 Renegade Model 30 Rugged ATE and User Guide

Accessories: 20132100-10 Calibration Fixture

20133100-10 110 VAC 60 Hz Power Supply/Cable  
20133110-10 110 VAC 50 Hz Power Supply/Cable  
20133120-10 110 VAC 400 Hz Power Supply/Cable  
20133200-10 A-10 DC Power Cable

We welcome your inquiries.  
For additional information, please contact:

**John Sublette**

Manager

210.522.3676

[john.sublette@swri.org](mailto:john.sublette@swri.org)

**Christopher Camargo**

Executive Director

210.522.2095

[christopher.camargo@swri.org](mailto:christopher.camargo@swri.org)



Avionics and Support Systems Department

**avionics.swri.org**

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210.522.2122

[ask@swri.org](mailto:ask@swri.org)

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Designed & printed by SwRI MPS 09-0724 JCN 272418 tp