

NEWSPACE MARKET · COMPANY PROFILE



PacSci EMC

United States · founded 1975 · psemc.com

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WITH DATASHEETS

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as of 20 August 2026

PacSci EMC

Pacific Scientific Energetic Materials Company (PacSci EMC) engineers critical pyrotechnic and energetic material solutions that operate precisely the moment they are commanded, down to the millisecond. Since 1975, the company has designed and manufactured initiators, detonators, safe and arm devices, explosive bolts, flight termination systems, and satellite payload release and sequencing systems used across commercial aircraft, military platforms, launch vehicles, spacecraft, and energy-sector operations. The company's product portfolio spans molecular-level chemical engineering to complete integrated subsystems, including electro-explosive devices, pyrotechnic cutters, cartridge actuated devices, and networked electronic ordnance. PacSci EMC's satellite payload release and sequencing systems have completed over 1,000 successful satellite separations with a 100% success rate, including 74 OneWeb satellite deployments, while its flight termination systems are qualified to MIL-STD-1901A and RCC319 standards. PacSci EMC operates manufacturing and engineering facilities in Chandler, Arizona and Hollister, California, and is now one of the brands united under Ralliant, a global technology company. The company positions itself as both a component supplier and engineering partner, offering technical advisory services alongside its energetics hardware for customers in aerospace, defense, oil and gas, and space markets.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

Canopy/Transparency Removal System Integration

PacSci EMC provides solutions for military aircraft canopy or transparency removal, either by jettison or fracturing, to ensure safe aircrew ejection.

Design and Manufacture of Pyrotechnic and Energetic Products

PacSci EMC designs and manufactures a wide range of pyrotechnic and energetic products and solutions for various industries and missions.

Escape System Sequencing

The company designs and integrates sequencing networks for escape systems, ensuring events occur in the proper order for safe aircrew recovery.

Pyrotechnic Initiation and Functioning for Ejection Seats

PacSci EMC supplies the necessary pyrotechnics for the proper initiation and functioning of ejection seat equipment to ensure successful aircrew recovery.

Product catalogue



PACSCI EMC

Detonators

Compact detonator product line with exceptional energetic material design for space launch vehicles to deep underground energy systems.

Design	Wide range of compact designs with extreme temperature capability
Initiation Options	Multiple initiating stimulus options
Performance	Proven performance in extreme environments
Compliance	Meets industry and military standards
Engineering	Advanced analytical lab design, chemist-developed formulations

price on request



PACSCI EMC

Explosive Bolts

Explosive bolts are pyrotechnic fasteners designed for rapid structural separation in applications such as missiles, launch vehicles, and spacecraft, available in various sizes and

Input Stimulus, Typical	3.5 amp (when electrically initiated)
Input Stimulus, Typical	TLX or SMDC input
Input Stimulus, Typical	4.5 AMP/4.1 millisecond
Tensile Strength	Up to 550,000 lbf
Operating Temperature	Designs as low as -65 °F and up to +270 °F
Separation Time, Typical	<10 milliseconds after application of All-Fire input stimulus
Separation Time, Typical	<5 milliseconds at greater currents

price on request

[datasheet](#)



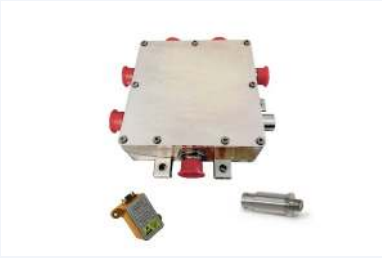
PACSCI EMC

Flight Termination System

The Flight Termination System (FTS) is a safety-critical product designed to prevent inadvertent initiation of a destruct sequence and to terminate the flight of missiles, rockets,

Redundant Ordnance events	5
Interface	High Speed serial Bus with Mission Computer
Fiber Optic Optical Block Compliance	MIL-STD-1901A
Sequencer Assembly Qualification	MIL-STD-1901A
Flight Termination Assembly Qualification	RCC319
AFSS Design	Open, modular, stackable and reconfigurable (OSMR)
Processor and electronics	Fault-tolerant

[price on request](#) [datasheet](#)



PACSCI EMC

Satellite Payload Release & Sequencing System (PRSS)

The Satellite Payload Release & Sequencing System (PRSS) is a high-reliability, precision timing system for deploying hundreds of satellites with microsecond repeatability and

Flight qualified	74 One-Web Satellite Separation
Flight qualified	space SRM Attitude Control/Delta V ignition system for Cubesats
Timing and simultaneity	<1ms
Demonstrated events on one vehicle	Up to 384
Communication options	RS422 (example)
Mission durations demonstrated	Hours to months

[price on request](#)

Contact PacSci EMC

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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