impact | ES™

We design and build products that matter.

ESCC 3420 Space Connectors

Lightweight, Titanium Connector for Space Flight

Overview

The 3420 Space Connector is designed to meet the harsh environments of aerospace applications and is affordable enough to be used wherever a lightweight, titanium connector is needed. The 3420 Space Connector is developed to meet the ESCC 3420 standard and to be compatible with the Mini and Midi AVIM® connectors. It is also compatible with many fibers and cables less than 2mm OD.

The most critical factor in guaranteeing the performance of a space connector is the assembly process. The method used at Impact ES—Ventura has been in continuous development since its founder qualified a single-mode connector for space in the 1990's. Impact ES—Ventura builds 1,000s of connectors for space flight.

Please note that Impact ES—Ventura's 3420 Space Adapter is not compatible with the AVIM® connector.

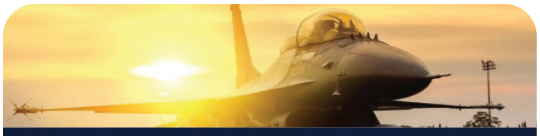
Connector Features:

- Assembled in the USA with quality components
- Molded boots are available where outgassing is not a concern
- Suitable for single-mode and multimode fibers up to 400µm OD
- Ceramic ferrule and a titanium body for better performance over time and in high vibration
- Polyolefin strain relief, for low outgassing, without having to vacuum bake off mold release
- 6.5mm (1/4") wrench flats on coupling nut so that the connector can be torqued to 1.0 Nm (9 lbf-in)

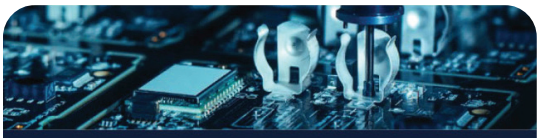
Planned Testing

	Parameters	Samples	Results
Vibration	>40 Overall RMS Gs 3 Axis, 20 minute per axis	Qty 12, 3-meter long 900µm OD Cables Qty 16, 3-meter long 2mm OD cables	Coming Soon
Shock	Three >500Gs shocks per +/- Axis 18 Shocks Total	Qty 12, 3-meter long 900µm OD cables Qty 12, 3-meter long 2mm OD cables	Coming Soon
Thermal Cycle	Temperature: -40° to 85° C Hold Time: 20 minutes Cycles: >200	Qty 12, 3-meter long 900µm OD cables Qty 12, 3-meter long 2mm OD cables	Coming Soon
Thermal Age	Temperature: 85° C Humidity 85° C Time: 168 hours	Qty 12, 3-meter long 900µm OD cables Qty 12, 3-meter long 2mm OD cables	Coming Soon

Values are given for design consideration. Performance is not guaranteed and therefore should be verified by testing completed cable assemblies.

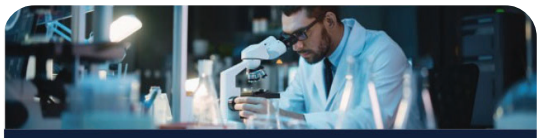


Aerospace

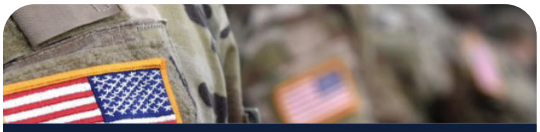


Autonomous & Robotics

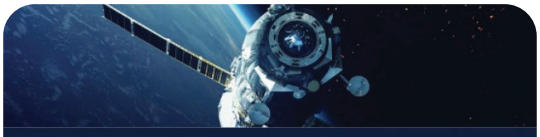
Commercial & Industrial



Medical & Life Sciences



Military & Defense



Space

Industries We Serve

At Impact Electronic Solutions, we offer cutting-edge prototype and full-turnkey production services, providing unparalleled innovation and seamless solutions to meet your needs.

Our expertise spans highly regulated and mission-critical environments. We deliver complex electronic, fiber optic, and electromechanical products with exceptional quality and reliability. From product development to full-scale manufacturing, we prioritize customer-centric solutions and support groundbreaking innovations.

With extensive experience, we ensure success across diverse industries by consistently meeting rigorous standards and exceeding expectations.

About Us

We are a dynamic team dedicated to delivering innovative electronic design and manufacturing services that consistently outperform industry standards.

Our headquarters are in the Pacific Northwest, and the Impact ES network spans five key locations across the U.S.:

- Clearwater, Florida
- Cranston, Rhode Island
- Grants Pass, Oregon
- Vancouver, Washington
- Ventura, California

Our facilities have been recognized for excellence by numerous corporations, organizations, and publications, showcasing our commitment to quality, precision, and customer satisfaction nationwide.

Fiber Optic Cables and Assemblies Certifications

ISO 9001:2015

ITAR Registered International Traffic in Arms Regulations

NASA 8739.5

Contact Us

sales@impactelectronics.com
805-644-5051
www.impactelectronics.com