

What does a GPS MIL SPEC Splitter Do For You?

The Equipment:

Unlike many COTS products, these splitters are designed and tested for military applications and environments where high reliability is required. They have proven reliability in the most challenging environments and are designed to deliver years of reliable service in extreme conditions.



Mil Spec Criteria:

Includes every aspect of the splitter, materials, treatment, dimensions of components, testing of the parts, wear and durability, accuracy, service life—every excruciating detail is specified, tested and certified.

Signal Integrity:

As GPS and timing distribution experts, we have designed our splitter so that the signal fidelity remains, in spite of the inherently weak GPS signal. Splitting the signal results in a weaker and distorted signal. GPS Source splitters prevent a compromise of GPS signal and maintain vehicle system operations, especially in an EMI rich environment.



Ruggedized Housing:

GPSS Mil Spec splitters are built to withstand the challenging environments experienced by service members. They are waterproof, shockproof, sandproof, dustproof, and work at extreme temperatures.

Mil Qual Test Reports:

GPS Source maintains complete qualification test summary reports. These reports include:

- Details on specific testing, methods and procedures
- Certified to meet or exceed MIL-STD-810, MIL-STD-1275, MIL-STD-704, MIL-STD-461
- Guaranteed to meet program requirements

High 1dB

Compression Point

or . . . How well the splitter amplifies the signal without internally generated interference.

Optimized for EMI Rich Environment with High P1dB

1. High 1dB Compression Point minimizes potential for interference from local transmissions
2. Increases reliability for critical system applications
3. Mitigates potential for interference from 3rd order intermodulation (IM3) products
4. Decreased susceptibility to jamming and spoofing

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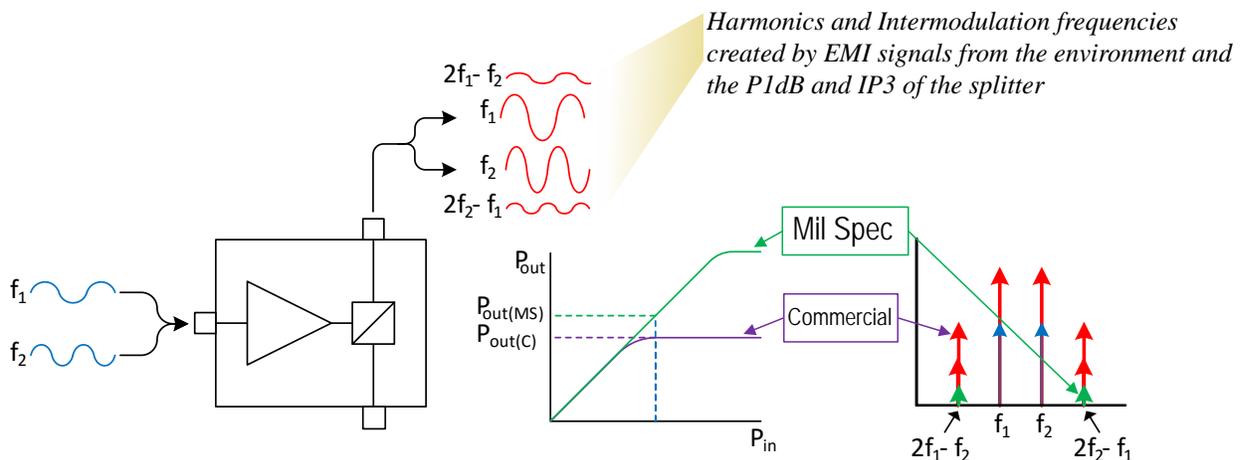
AS9100 & ISO 9001:2008 Certified
Veteran Owned Small Business
CCR Registered
CAGE: 1RTJ5
DUNS: 883995677
NAICS: 334220, 334290, 334511,
541330, 541690

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Why is a Mil Spec Splitter from GPS Source Better than a Commercial Splitter?

GPS Signal Strength is Maintained, *Even When Surrounded by Other Similar Frequencies*

One important engineering problem to consider in today's military communication and navigation systems is the detection of very weak signals (e.g. GPS) in the presence of strong interfering signals at nearby frequencies. Using the improper signal splitter in EMI rich environments can make this problem much worse. A splitter with a very low compression point (referred to as "P1dB") and poor gain characteristics (i.e. poor linearity, which is referred to as "IP3") will internally create other interfering signals, such as "harmonics" and "intermodulation frequencies". Harmonics and intermodulation frequencies make a receiving weak GPS signals in a EMI rich environment much more difficult, if not impossible. Thus, it is imperative that only MIL-SPEC Splitters are used in EMI rich military environments.



Mil-Spec Splitter Designed & Qualified to:

- ◆ MIL-STD-810 (Harsh Physical Environments)
- ◆ MIL-STD-1275 (-704) (Power & Surge Protection)
- ◆ MIL-STD-461 (Electro Magnetic Interference)
- ◆ Optimized for EMI Rich Environment (i.e. High P1dB)

Commercial Splitter Designed For:

- ◆ Commercial Environments
- ◆ GPS Receiver Provide Power Source
- ◆ Optimized for Very Low Power Consumption (i.e. Low P1dB & IP3)

