



DIAMOND PRESS RELEASE

DIAMOND enhances and upgrades its existing series of Power Solution (PS) interconnects to withstand up to 16 watts optical power.

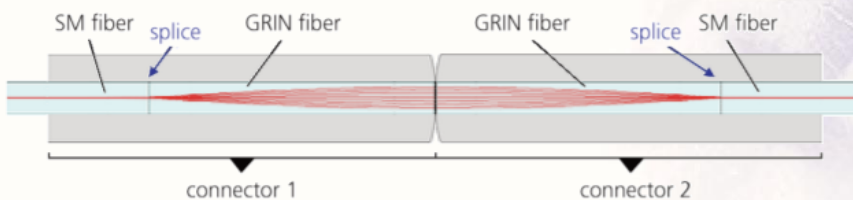
Switzerland, Losone, October 2021. DIAMOND SA, the leader in high precision fiber optic interconnect solutions, is pleased to announce the upgrade of the existing series of Power Solutions interconnects to withstand up to 16W of power in Single-mode optical fiber, maintaining exceptional Insertion Loss (IL) and Return Loss (RL) values.

Diamond Power Solution (PS) connectors are based on proprietary ferrules terminated with Graded Index Fibers (GIF). GIF expands the beam with a magnification factor of 2.5 to 4.5 performing like a compact GRIN lens. Compared to ball lenses, GIF terminated connector ferrules offer the advantage of superior optical performance in terms of Insertion Loss (IL) and Return Loss (RL).

Until now, a high-power ferrule with approximately 25 μm Single mode (SM) expanded beam diameter was used in the DIAMOND PS standard connectors allowing up to 6W long life connectivity. By introducing new manufacturing techniques, we are now able to provide an improved PS+ design offering around 36 μm SM expanded Mode Field Diameter (MFD). This would allow the capability of high-power transmission of up to 16W within Single mode optical connectors.

The improved PS+ is available as E-2000® PC 0°, which will result in an Insertion Loss (IL) of 0.4 dB and Return Loss (RL) of 50 dB and will produce all the features currently stated for the E-2000® as being perfectly suitable for High Power applications, including a protective cap and interlock.

GIF Expanded Beam Connection





DIAMOND Ferrule Connector Comparison

FERRULE CONNECTOR COMPARISON

Ferrule Type	IL (db)	RL (dB)	Max Power
PS	0.4	75	6 W
PS+	0.4 max.	50	16 W

About DIAMOND SA

DIAMOND SA is recognized worldwide for providing the highest quality and technically advanced fiber optic interconnect products and solutions. We employ state-of-the-art production methods and techniques that are unparalleled in the market. Our patented two-part ferrule, combined with the precision of our “Active Core Alignment” process, results in superior optical performance. Other products and technologies include Power Solution, Polarization Maintaining, Expanded Beam and High Temperature.

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Product Information

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