## POWER SOLUTION PS+ INTERCONNECTS UP TO 16W

## ENHANCED HIGH POWER SINGLE MODE FIBER OPTIC CONNECTORS

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 is 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 16 W** within SM optical connectors. The improved PS+ will be available as E-2000® PC 0°, which will result in an IL of 0.4 dB and 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.



## FERRULE CONNECTOR COMPARISON

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

## GIF EXPANDED BEAM CONNECTION



