

Bulgin unveils innovative expanded beam fibre optic connector technology

[Bulgin](#) – a leading manufacturer of environmentally sealed connectors and components – is pleased to announce the launch of a patented new expanded beam fibre optic connector and cable management system. This technology – which is now available in the [5000 Series Expanded Beam Connector](#) – is the result of a two-year project to produce a low-cost, sustainable expanded beam product suitable for a wide range of industries.

Expanded beam fibre optic connectors are typically used in applications where it is important to reduce the impact of dirt or contamination when joining two fibre optic cables. Accurate alignment of ferrules and minimal twisting of fibre optic cables are critical to minimise light loss and ensure efficient transmission of the signal through the connector. Bulgin's patented technology offers a unique ferrule-lens alignment technology in combination with a cable management system to prevent twisting of the optical fibres. This revolutionary solution allows the rapid termination and repair of cables in the field, making the 5000 Series Expanded Beam Connector suitable for harsh environment applications, including military communications, mining, oil and gas, and broadcasting. It is particularly suited to temporary fibre optic set-ups that need to be quickly assembled and dismantled, such as concert venues and sports stadiums.



Thisen Bird, Associate Product Manager at Bulgin, explained: “We have successfully developed a redeployable synthetic polymer connector system that offers the same robust level of performance as traditional military standard connectors, but at a lower cost. This project shows what can be achieved when a knowledgeable team is given the freedom to innovate. We are proud of the trust placed in us by the company, allowing us to follow our ideas, and resulting in a connector with these unique attributes.”

Jose Latre, Lead Development Engineer at Bulgin, continued: “This was a very rewarding project, culminating in a patented product that meets the demands of any industry needing quick deployment of fibre optic systems in harsh environments. It opens up the use of expanded beam technology to applications where the price of previous products may have been prohibitive, without compromising on the high level of reliable signal transmission that these users require.”

Learn more about the [5000 Series Expanded Beam Connector range](#).