L&KF Co., Ltd.

EXPANDED BEAM CONNECTOR

Sales & Marketing Proposal | Expanded Beam Connector

Research Lead: Lee Soo Young

1. Why L&KF Beam Connector?

22 Years of Technical Experience Technical background led by Lee Soo Young, who has focused on non-contact beam connector development since 2001.	**World Class Product Recognition** Expanded beam connector field selected as a World Class Product of Korea in 2017, as stated in the source material.
Defense Deployment References Field specification and naval frigate radar cable assembly references stated in the source material.	**Export Track Record** Exports to more than 30 countries and sales to approximately 40 global companies are stated in the source material.

2. Core Value Proposition

A non-contact connector concept designed to reduce contamination risk in the field.

Conventional physical-contact optical connectors can be affected by small dust particles or contamination at the fiber endface. L&KF's non-contact expanded beam connector concept uses ball lenses to expand and transmit the optical signal without direct fiber-endface contact. This approach is intended to reduce sensitivity to field contamination and support more reliable optical connection review for defense, marine, broadcasting, industrial and aerospace environments.

3. Target Customers and Industries

Industry	Customer Pain Point	L&KF Solution Direction
Defense	Frequent connector replacement due to field dust, shock and moisture	Defense field specification references and TICN / naval system application references stated in the source material
Marine / Underwater	Conventional connectors may fail in high-pressure and high-salinity environments	Marine robot supply reference and waterproof connector design review
Broadcasting / Media	Outdoor relay systems may experience signal interruption due to contamination	Outdoor broadcasting connector concept introduced at KOBA 2012
Plant / Energy	Difficult maintenance in radioactive, explosive or restricted access sites	Field-maintenance-oriented non-contact connection concept
5G / Data Center	High-density channel connection requires reliable, compact interconnection	24-channel FOBEX-HD direction for high-density optical interconnection
Aerospace	Temperature, vibration and durability requirements	AS9100 certification stated in the source material and aerospace application references

4. Competitive Advantage Summary

- Technology: non-contact beam expansion approach based on a ball-lens optical interface.
- Experience: long-term specialization in the non-contact optical connector field led by Lee Soo Young.
- Certifications: World Class Product, AS9100, performance certification and defense field specification references are stated in the source material.
- References: naval frigate, marine robot and outdoor broadcasting application references are described in the source material.
- Global: exports to more than 30 countries and participation in international exhibitions such as OFC are stated.
- Future Direction: silicon photonics, 5G and high-density data center interconnection concepts are under review.

5. Contact and Proposal Process

Item	Content
Company	L&KF Co., Ltd.
Research Lead	Lee Soo Young - former CEO of FOSTEC Co., Ltd.; creator of the FOBEX brand
Product Inquiry	Non-contact expanded beam connector product line-up
Proposal Process	1) Requirement meeting -> 2) Technical demonstration -> 3) Sample test -> 4) Supply agreement
Reference Website	www.fostec.co.kr - FOBEX technology reference, as stated in the source material

Marketing Compliance Note

This English proposal is prepared based on the Korean source material supplied by L&KF. Before using it with customers, please verify all certification names, award titles, delivery references, export numbers and website information against official documents. Avoid using absolute claims such as "the only solution" or guaranteed performance unless supported by a final test report or contract specification.