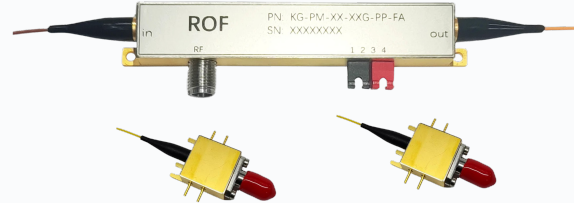




DC - 70 GHz · OPTOELECTRONICS · EOMS · RF
OVER FIBER · QUANTUM APPLICATIONS

Rofea Optoelectronics specialises in optoelectronic components and RF solutions up to 110 GHz. Electro-optic modulators (TFLN up to 110 GHz), photodetectors, fibre lasers and RF-over-fibre modules for high-frequency communication, quantum optics and precision measurement. bq-microwave is the authorised European distributor.



Product Portfolio

Electro-Optic Modulators

UP TO 70 GHz

Phase and intensity modulators for high-speed optical communications.

RF Components

UP TO 70 GHz

Coaxial RF components for system integration and precision test platforms.

Custom Solutions

ON REQUEST

Tailored optoelectronic and RF designs to customer specification.

Strengths at a glance

TFLN Modulators up to 110 GHz

Thin Film Lithium Niobate (TFLN) Mach-Zehnder intensity modulators in 20G, 25G, 40G, 70G and 110G formats — top-tier electro-optic performance for 5G backhaul, datacom and mmWave platforms.

Full EOM Portfolio

Lithium niobate modulators at 780, 850, 1064, 1310 and 1550 nm — intensity, phase, Y-waveguide variants and bias-point controllers.

Acousto-Optic Modulators

AOM series for fibre-laser systems, free-space and fibre-coupled acousto-optic designs — precision control for quantum optics and material processing.

Photodetectors

APD detectors, balanced receivers, single-photon detectors (InGaAs), silicon photodetectors up to 2.5 GHz — receiver solutions for optical and quantum communication.

RF over Fibre

Microwave-fibre transmission modules at 0.6–6 GHz and 3/6 GHz analogue links — low-loss RF signal distribution over optical fibre.

Quantum & Research

Y-waveguide modulators for Quantum Key Distribution (QKD), narrow-band filters, fibre-laser amplifiers (EDFA, SOA) and optical delay lines for research laboratories.

Industries & Use Cases

Optical Communications

5G/6G datacom with TFLN devices up to 110 GBaud, coherent optical links, DWDM systems and fibre-backbone infrastructure.

Quantum Communication (QKD)

Y-waveguide modulators, single-photon detectors and phase modulators for Quantum Key Distribution and secure cryptographic systems.

Fibre-Laser Systems

AOMs, phase modulators and optical delay lines for industrial fibre lasers, material processing and scientific laser platforms.

RF-over-Fibre Platforms

Antenna signal transport, distributed antenna systems (DAS), radar IF distribution and secure microwave links over optical fibre.

Research & Universities

Optoelectronic components for photonics research, integrated optical circuits (PIC), quantum optics and precision spectroscopy.

Optical Test & Measurement

Variable optical delay lines (manual and motorised), bias-point controllers and polarisation controllers for optical test setups and calibration.

Available through bq-microwave

bq-microwave is the authorized European distributor for Rofea. Fast procurement, short lead times and personal technical consultation.

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