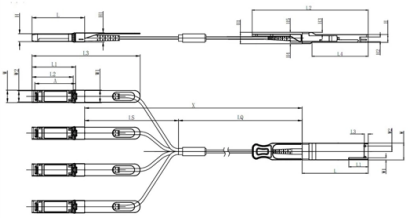
Quantum Technology Optical Module



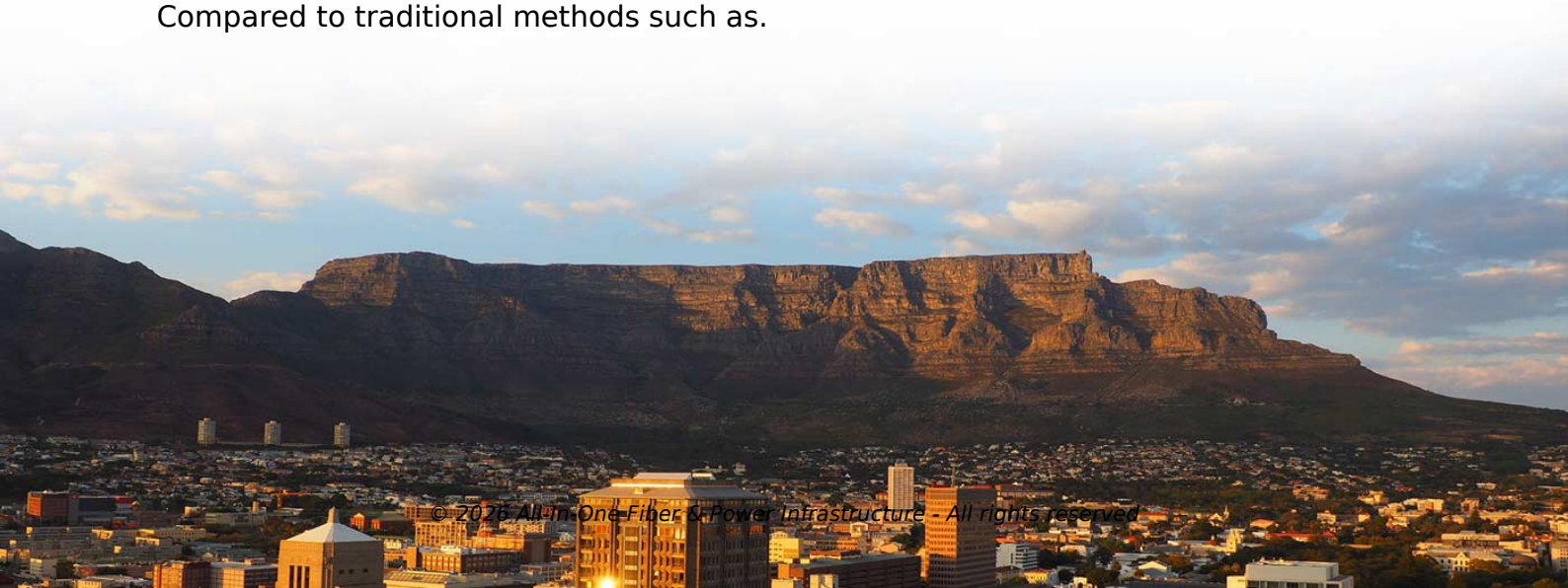
Unit mm

QSFP28	L	L1	L2	L3	L4	W	W1	W2	H	H1	H2	H3	H4	H5	H6
Max	72.2	-	128	4.35	61.4	18.45	-	6.2	8.6	12.4	5.35	2.5	1.6	2.0	-
Type	72.0	-	-	4.20	61.2	18.35	-	-	8.5	12.2	5.2	2.3	1.5	1.8	6.55
Min	68.8	16.5	124	4.05	61.0	18.25	2.2	5.8	8.4	12.0	5.05	2.1	1.3	1.6	-

SFP28	L	L1	L2	L3	W	W1	W2	H	H1	A
Max	57.6	47.7	44.55	119.9	13.8	14.0	12.3	8.7	10.3	45.25
Type	57.4	47.5	44.35	117.9	13.55	13.8	12.1	8.5	10.1	45
Min	57.2	47.3	44.15	115.9	13.3	13.6	11.9	8.4	9.9	44.65

Overview

Our compact light control units enable efficient beam conditioning through switching and modulation, utilizing miniaturized acousto-optic and electro-optic modulators. These modules serve various quantum technology applications, e. quantum sensing, timing and precision. Hybrid integrated miniaturized quantum light modules are newly developed components for mid-infrared (mid-IR) hyperspectral imaging and quantum optical coherence tomography (OCT) sensing. Compared to mechanical or lithographic processes, laser radiation has the benefit of flexible and fast. In this blog summarizes indie Photonics' optical components and subsystems that empower next-generation quantum technologies, specifically quantum computing and Quantum Key Distribution (QKD). indie's portfolio includes ultra-low-phase-noise lasers, high-performance optical filters, and advanced. Micro-Integrated Photonic Modules for Quantum Technology Applications on Ground and in Space Alina Hahn, Ahmad Bawamia, Jonas Hamperl, Janpeter Hirsch, Simon Kubitza, Christian Kürbis, Max Schiemangk, Marvin Schilling, and Andreas Wicht A. In 1925, the birth year of quantum mechanics, physicist Lucy Mensing leaves the Göttingen physics Christmas party and travels into the future. Our method uses multi-degree-of-freedom photon encoding to enable rapid and accurate evaluation of optical quantum modules. Compared to traditional methods such as.



© 2026 All-in-One Fiber & Power Infrastructure - All rights reserved

Article Content

Apr 07, 2026

Optical Modules Market Research Report 2034

The optical modules market was valued at $14.8 billion in 2025 and is projected to reach $39.6 billion by 2034, growing at a CAGR of 11.5%.

Oct 02, 2025

Advanced Quantum Physics

They deal with atom-light-interactions, Rydberg physics, quantum sensors, quantum gases in magnetical and optical traps, optical and microwave resonators, many-body quantum systems, and

Jan 26, 2026

Nu Quantum adopts White Rabbit | Electronics Weekly

Nu Quantum adopts White Rabbit Nu Quantum, the Cambridge quantum entanglement startup, is adopting CERN-born White Rabbit (WR) technology which allows timing synchronisation

Sep 16, 2025

Recent progress in quantum photonic chips for quantum ...

Recent years have witnessed significant progress in quantum communication and quantum internet with the emerging quantum photonic chips, whose characteristics of scalability,

Aug 05, 2025

indie Photonics Solutions for Quantum Technologies

indie Photonics stands at the intersection of photonics and quantum innovation, offering a technology platform that combines ultra-stable light sources, precision optical filtering, and advanced

Dec 03, 2025

KIST Connects Korean Quantum Startups with IBM to Accelerate

These include QUAD, specializing in superconducting nanowire single-photon detector (SNSPD) technology for quantum communication and defense; OptiQ-Labs, which develops laser

Sep 14, 2025

Overview of 11 Photonic Quantum Computing

© 2026 All-In-One Fiber & Power Infrastructure - All rights reserved

Photonic technologies are essential across virtually all quantum computing modalities. Superconducting, trapped ion, and neutral atom systems

Jul 03, 2025

Quantum Optical Components

The Fraunhofer ILT scientists are developing, among other things, photon sources, photonic components and systems for future applications of quantum technology.

Jan 07, 2026

Tower Semiconductor, NVIDIA advance 1.6T AI optics

Tower Semiconductor (NASDAQ: TSEM) announced a collaboration with NVIDIA on 1.6T data center optical modules using Tower''s silicon photonics

Jan 20, 2026

Integrated Photonics for Quantum Communications and

Exploring cutting-edge advances of integrated photonics, recent breakthroughs and challenges are highlighted, showing a roadmap for

Jul 27, 2025

Chair of Optical Quantum Technologies

The unique properties of quantum mechanics can sometimes be surprising and unintuitive but also lead to unprecedented

Nov 21, 2025

Co-Packaged Optics (CPO)Co-Packaged Optics (CPO)

Traditional pluggable optical modules are increasingly constrained by signal loss, power consumption, and latency because they require long electrical traces

Nov 01, 2025

Sivers and Jabil team up on 1.6T optical transceivers for AI data c...

Swedish Sivers Semiconductors has entered a collaboration with Jabil, one of the world''s largest EMS providers, to develop an energy-efficient 1.6T pluggable optical transceiver module

Jun 04, 2026

POET Technologies and Quantum Computing Inc. to Co-Develop 3.2

About POET Technologies Inc. POET Technologies is a design and development company offering high-speed optical engines, light source products, and custom optical modules for

© 2026 All-In-One Fiber & Power Infrastructure - All rights reserved

Feb 16, 2026

[2412.20092] Efficient Evaluation of Optical Quantum Modules via Two ...

To address this need, we propose a two-photon quantum module evaluation method based on high-dimensional Hong-Ou-Mandel interference. Our method uses multi-degree-of-freedom

Mar 12, 2026

Photon Avalanche Diodes for Single-Photon Counting in Quantum Optics

The proliferation of photon avalanche diodes (PADs) in quantum optics applications has triggered comprehensive export control frameworks across major technology-producing nations.

Oct 07, 2025

Co-Packaged Optics — a deep dive | APNIC Blog

In the Quantum-X photonic switch system, only 18 laser modules connected at the front panel supply light to all 144 x 800G optical channels. Each

Jan 16, 2026

Micro-integrated photonic modules for quantum technology applications

We present our latest development of photonic modules for quantum technology applications and show first results of their electro-optical performance. Based on the ECDL-MOPA

Jun 25, 2026

Multi-Channel Acousto-Optic Modulator (AOM) Illumination Module

Precision control of optical beams for quantum state manipulation L3Harris is building upon more than 40 years'' experience in developing AOM devices and technologies to design illumination modules

Jun 22, 2026

Integrated optical modules for quantum communication

As quantum communication moves from the lab to real life, optical integration will be key. Researchers are already preparing for the transition with the introduction of

Jul 29, 2025

Quantum Light Modules | Ferdinand-Braun-Institut

Hybrid integrated miniaturized quantum light modules are newly developed components for mid-infrared (mid-IR) hyperspectral imaging and quantum optical

© 2026 All-In-One Fiber & Power Infrastructure - All rights reserved

Jun 23, 2026

Quantum Computing Inc. (QUBT) Q1 2026 Earnings Call Transcript

And for such, we needed to have not only our core quantum nonlinear optical technology and circuits, but also photonics products and the controlling electronics, for example.

Jul 06, 2025

Silicon Photonics Market Size, Growth Drivers

Silicon Photonics Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031) The Silicon Photonics Market Report is Segmented by

Jan 17, 2026

A manufacturable platform for photonic quantum computing

A manufacturable platform for quantum computing with photons is introduced and a set of monolithically integrated silicon-photonics-based modules is benchmarked, demonstrating dual-rail...

Oct 10, 2025

Quantum Computing Optical Modules | Speed, Precision

Explore the role of optical modules in quantum computing, their impact on speed and precision, challenges, and the future of technological

Sep 01, 2025

Introducing Omega

The next step is to optically interconnect multiple modules, leveraging our high-fidelity qubit transmission technology to build the large-scale, fault

Mar 08, 2026

Micro-Integrated Photonic Modules for Quantum Technology

We present our narrow-linewidth micro-integrated diode laser modules that have already been successfully used for quantum technology applications on ground and in space, as well as our new

Jul 06, 2025

Coherent to Unveil Breakthrough AI-Scale Optical Innovations and ...

Coherent will unveil AI-scale optical innovations at OFC 2026, showcasing technologies that advance bandwidth, scalability, and energy efficiency.

© 2026 All-In-One Fiber & Power Infrastructure - All rights reserved

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://regen-power.co.za
Email: info@regen-power.co.za
Phone: +49 176 845 2036
Address: Taunusanlage 15, 60325 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

© 2026 All-In-One Fiber & Power Infrastructure - All rights reserved