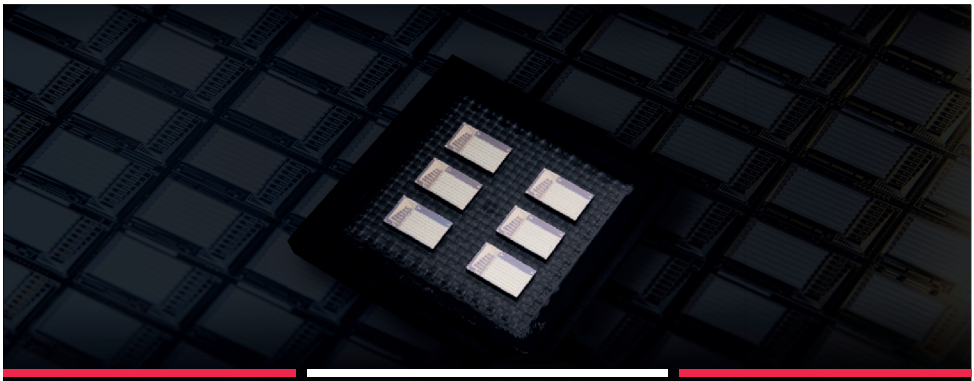


DR8 PIC with Differential Drive

- Requires 1.5 Vpp differential swing to achieve a 5 dB modulated ER
- Ideal for direct drive from DSPs with integrated drivers
- Features >130 GHz 3 dB electro-optic bandwidth

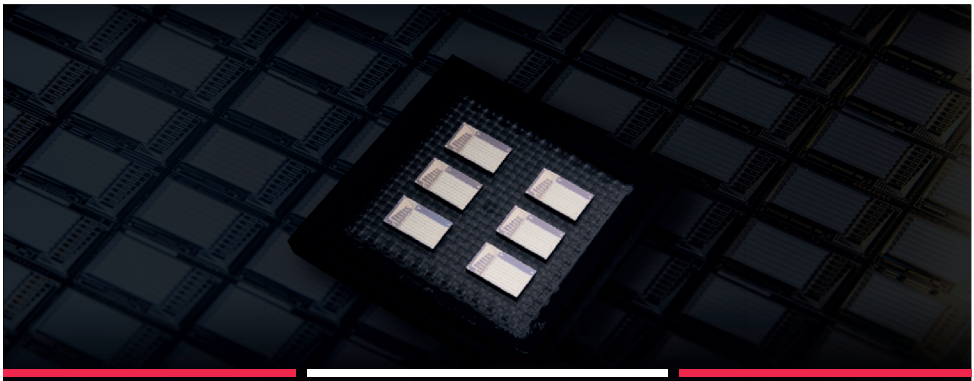
DR8 PIC with Single-Ended Drive

- Requires 1.4 Vpp single-ended swing to achieve a 5 dB modulated ER
- Ideal for use with linear drivers such as single-ended DSP or LPO
- Featuring >150 GHz 3 dB electro-optic bandwidth

Contact Us For More Information:

- Product Briefs
- Application Notes
- PIC Samples
- Custom chip development

HYPERLIGHT



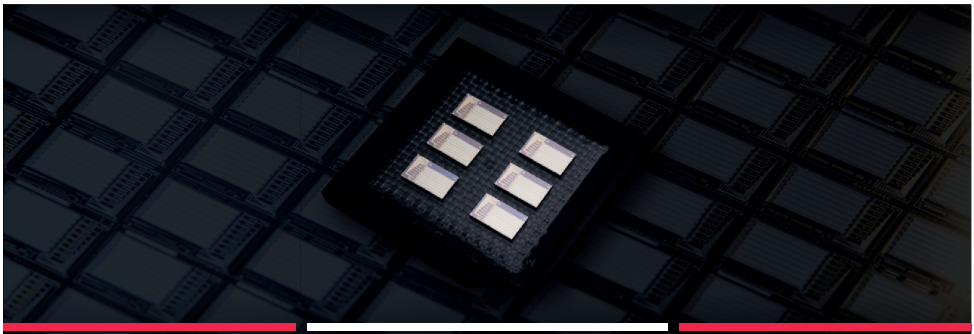
DR8 PIC with Differential Drive (Ultra-Low Power)

- Requires 0.6 Vpp differential swing to achieve a 5 dB modulated ER
- Designed for direct drive from DSPs without an integrated driver, ensuring ultra-low power consumption

Key Features:

- Reliable & qualified
- Supports single or dual input laser to drive all 8-channels
- CMOS-level drive voltage, featuring our patented ultra-low drive voltage design
- > 110 GHz electro-optic bandwidth
- Low total optical insertion loss
- Robust optical interface to single-mode fibers
- Known-Good-Die (KGD) or wafer delivery option
- Comprehensive end-to-end customer support

HYPERLIGHT



130 GBaud DPIQ PIC

HyperLight's **130 GBaud DPIQ PICs** are custom designed for CDM and ZR applications, featuring high-bandwidth and low voltage modulators, compatible with a large variety of linear drivers.

Custom DPIQ PICs

- 130, 200, 260 GBaud designs
- Low Vπ
- Low optical loss
- Single-ended or differential electrodes
- Customized I/O interfaces and formfactor, suitable for HB-CDM, QSFP-DD ZR/ZR+ etc.

Key Features:

- Reliable and Qualified
- Patented ultra-low drive voltage design
- >110 GHz electro-optic bandwidth
- Low total optical insertion loss
- Integrated polarization multiplexing
- Robust interface to single-mode fibers
- Known-Good-Die (KGD) delivery
- Strong end-to-end customer support

Contact Us For More Information:

- Product Briefs
- Application Notes
- PIC Samples
- Custom chip development

110 GHz Intensity Modulator

Key Features:

- Proven Production Grade 110 GHz EOM
- > 125 GHz bandwidth
- Industries' lowest half-wave voltage

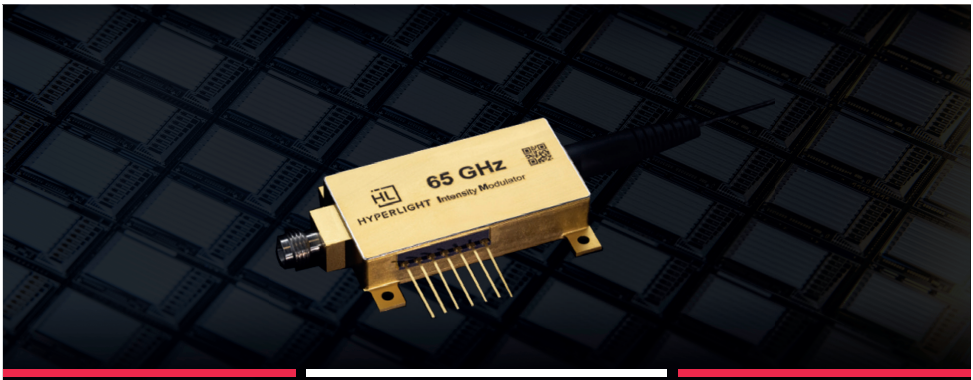
NEW - **1.4V** Low $V\pi$ version available!

- Compact footprint
- High extinction ratio
- Stable DC biasing
- High optical and RF power handling
- 1.0 mm RF Connector (W), PM fibers with FC/APC connectors
- C/L-band, O-band, 1µm Coverage
- Bias controller available
- **NEW** - **Cryogenic-compatible** version available!

Target Applications:

- 448 G/lane testing
- 240 GBaud testing
- Reference transmitters for test and measurement
- Radio-over-fiber and satellite links

HL HYPERLIGHT



65 GHz Intensity Modulator

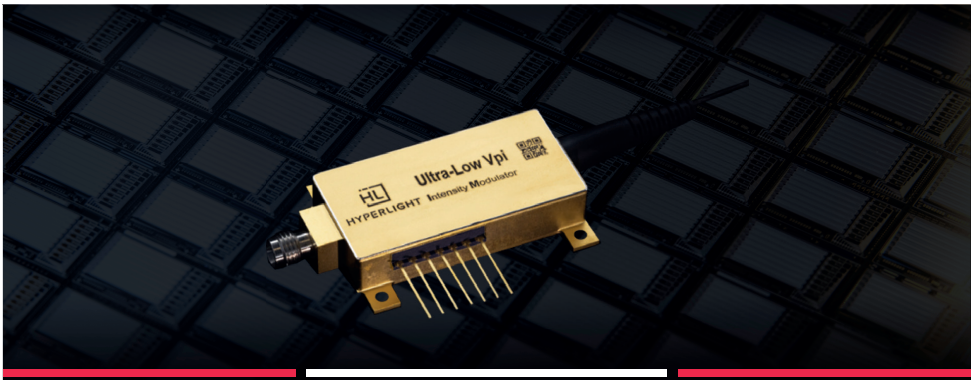
Key Features:

- > 70 GHz operating bandwidth
- 1.4 V half-wave voltage
- V-type (1.85 mm) connector
- Compact footprint
- High extinction ratio
- Stable DC biasing
- High optical and RF power handling
- **NEW** - **Cost-effective** version available!
- C/L-band, O-band, 1µm Coverage
- Bias controller available

Target Applications:

- 200 G/lane testing
- 150 GBaud testing

HYPERLIGHT



Ultra-Low $V\pi$ Intensity Modulator

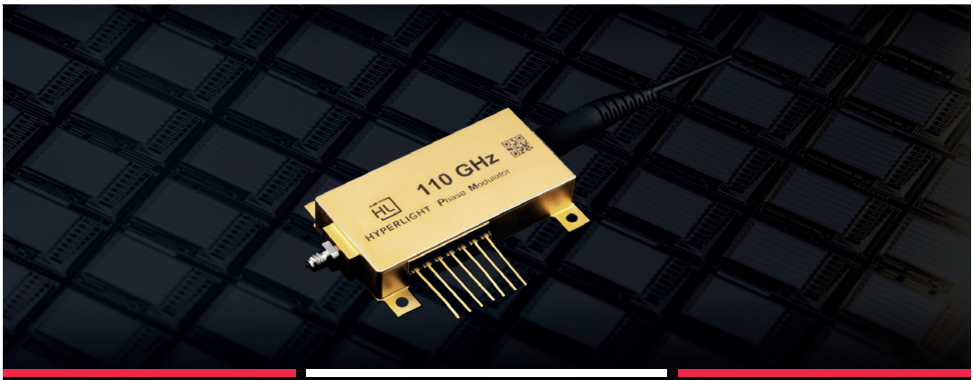
Key Features:

- > 40 GHz bandwidth
- 0.7 V half-wave voltage
- Compact footprint
- High extinction ratio
- Stable DC biasing
- High optical and RF power handling
- Dual outputs for balanced detection

Target Applications:

- Radio-over-fiber and satellite links
- Wireless
- 5G/6G

HYPERLIGHT



110 GHz Phase Modulator

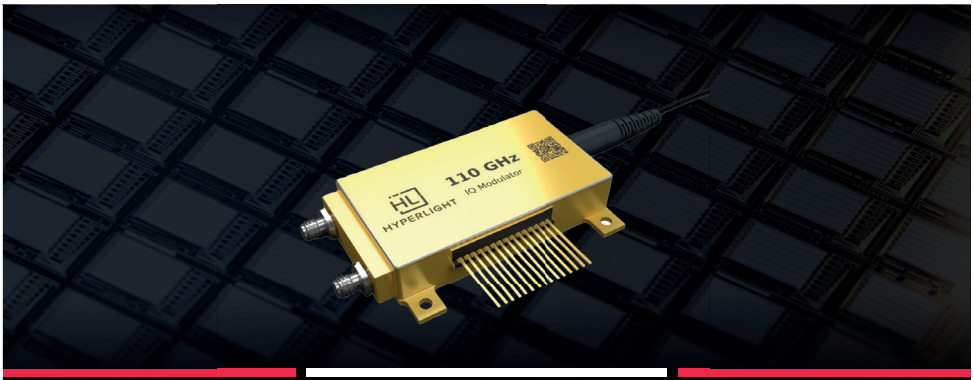
Key Features:

- > 110 GHz bandwidth
- Record low Vpi
- W-type (1.0 mm) connectors
- High optical and RF power handling

Target Applications:

- Optical computing
- Quantum communication
- Microwave photonics
- Electro-optical comb generation

HYPERLIGHT



110 GHz IQ Modulator

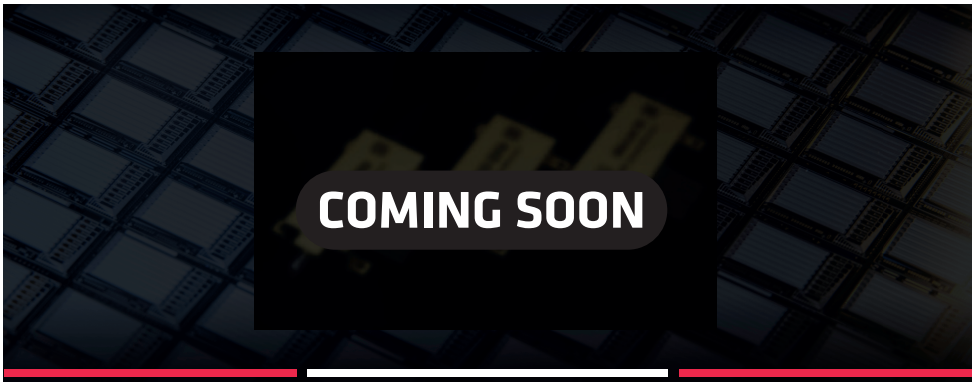
Key Features:

- Single-polarization IQ modulator
- > 125 GHz bandwidth
- Supports 240 GBaud signaling
- Fully packaged with two W-type (1.0 mm) connectors
- IQ bias controller available
- C/L-band, O-band coverage

Target Applications:

- 240 GBaud testing
- 110 GHz single sideband modulation

HYPERLIGHT



145 GHz Intensity Modulator

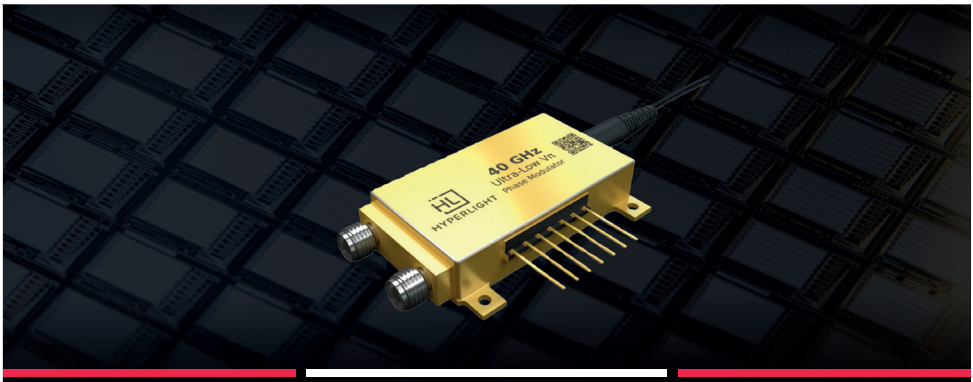
Key Features:

- > 145 GHz bandwidth
- 0.8mm connector
- High extinction ratio
- Stable DC biasing
- High optical and RF power handling

Target Applications:

- 260 GBaud testing
- 140 GBaud testing
- 70 GHz single sideband modulation

HYPERLIGHT



40 GHz Ultra-Low Vπ Phase Modulator

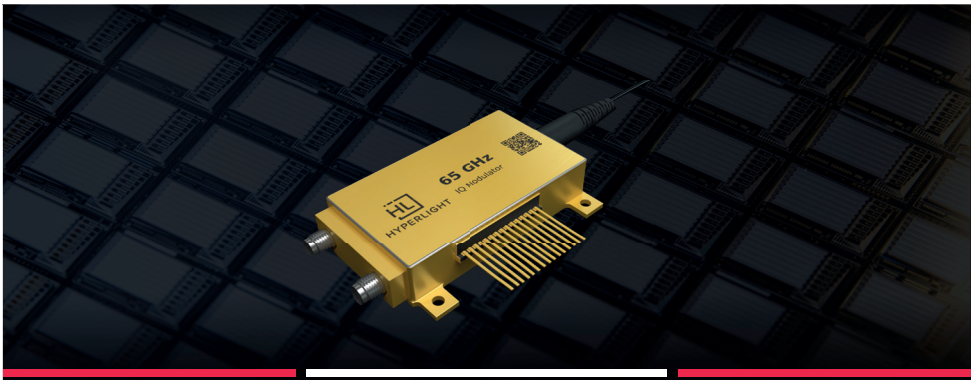
Key Features:

- Ultra-low half-wave voltage
- External termination for high **5W** RF power handling
- > 40 GHz EO bandwidth
- High optical power handling
- Simplified single-piece modulator solution for EO comb generation

Target Applications:

- Electro-optical comb generation
- Quantum measurements
- Microwave photonics

HYPERLIGHT



65 GHz IQ Modulator

Key Features:

- Single-polarization IQ modulator
- > 70 GHz bandwidth
- Supports 140 GBaud signaling
- Fully packaged gold box with two V-type (1.85 mm) connectors
- IQ bias controller available to 65 GHz IQ
- C/L-band, O-band coverage

Target Applications:

- 140 GBaud testing
- 70 GHz single sideband modulation

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