808 nm / 750 mW / FC Packaged LPC laser power converter

Converts incident laser energy into DC electricity. Select the configuration against the optical interface, input conditions, load and heat sinking.



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Photograph of the reference configuration

Reference designation	FS-LPC-808-750-FC
Input wavelength	800–840 nm
Typical operating points	0.844 W @ 1.5 W optical input / 6.15 V / 0.1372 A
Maximum optical input (adequate cooling required)	8 W
Operating case temperature	−40…+85 °C

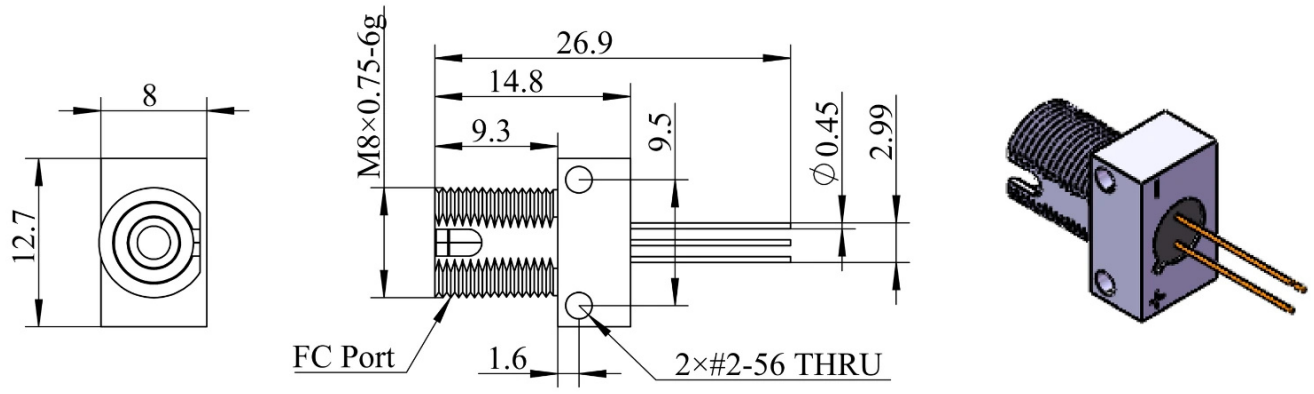
Applications & selection

Isolated power for industrial sensors; high-voltage equipment monitoring; remote electronics in high-EMI environments.

For enquiries: wavelength, optical power at the receiver, fiber connector or beam profile, target output, heat sinking and quantity.

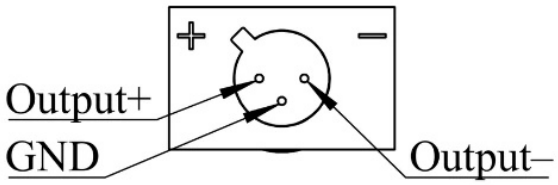
Dimensions & mounting

Dimensions in mm; reference drawing. Confirm the latest engineering drawing before delivery.



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Dimensions & mounting



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Pins & electrical interface

Absolute maximum ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage temperature	TS	−40	25	85	°C
Operating case temperature	TC	−40	—	85	°C
Relative humidity	RH	5	—	85	%
Maximum optical input power	Popt IN	—	—	8	W

Images and pin assignments describe this reference configuration; other electrical interfaces or packages require separate confirmation.

Fiber specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Fiber core diameter	D	—	40–400 (reference range)	—	µm
Numerical aperture	NA	0.17	0.22	0.22	—
Fiber length	—	—	Application-specific	—	m

Typical operating points

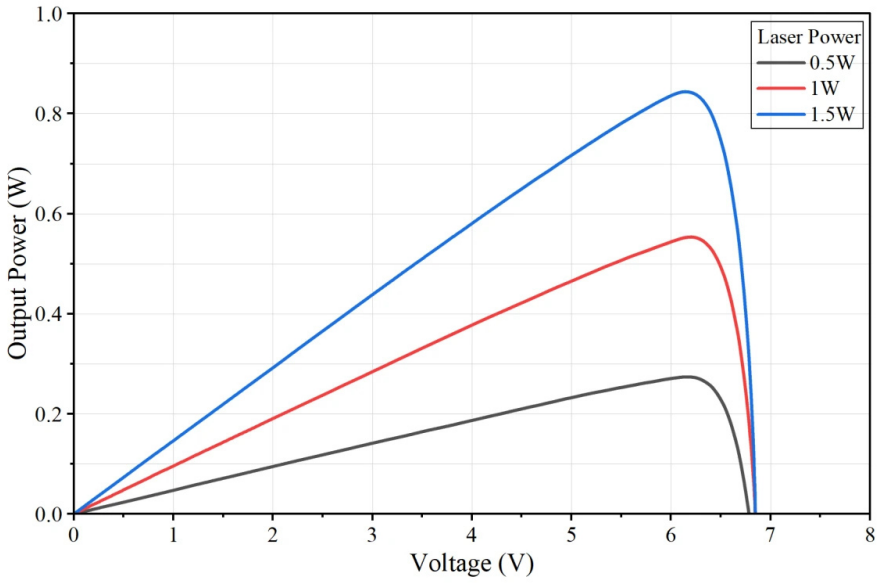
Operating points and curves: nominal wavelength, 25°C case temperature. Optical input is power at the receiver, not transmitter output or end-to-end electrical output.

Optical input / W	Electrical Pmpp / W	Vmpp / V	Impp / A
0.5	0.274	6.18	0.0443
1.0	0.554	6.20	0.0893
1.5	0.844	6.15	0.1372

Reference values support selection. Confirm final configuration and acceptance conditions in the technical agreement. A power class is not guaranteed output under every operating condition.

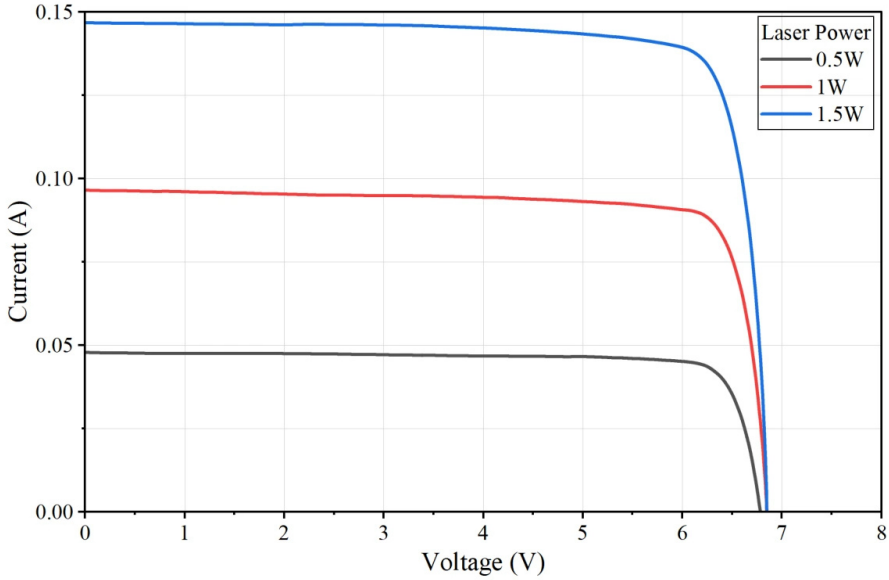
Typical characteristic curves

Operating points and curves: nominal wavelength, 25°C case temperature. Optical input is power at the receiver, not transmitter output or end-to-end electrical output.



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Output power–voltage curve



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Output current–voltage curve