808 nm / 15 W / SMA905 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-808-015W-SMA905
Input wavelength	800–840 nm
Typical operating points	15.92 W @ 30 W optical input / 5.91 V / 2.693 A
Maximum optical input (adequate cooling required)	30 W
Operating case temperature	−40…+85 °C

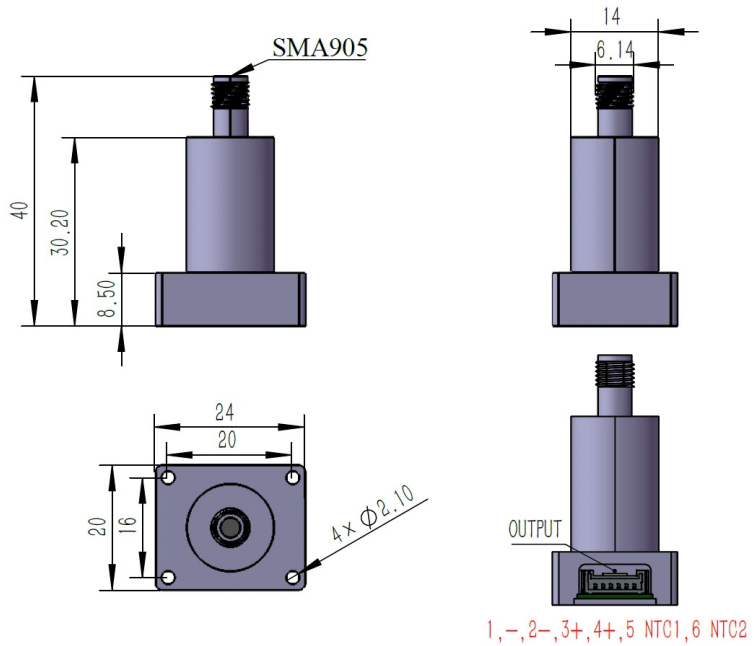
Applications & selection

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

1	−
2	−
3	+
4	+
5	NTC1
6	NTC2

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	%
Optical input power limit	Popt IN	—	—	30	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

Temperature sensor

Parameter	Symbol	Min.	Typ.	Max.	Unit
NTC, B = 3930 K	R	—	10	—	kΩ
Sensor temperature range	T	−40	Application-specific	150	°C

Typical operating points

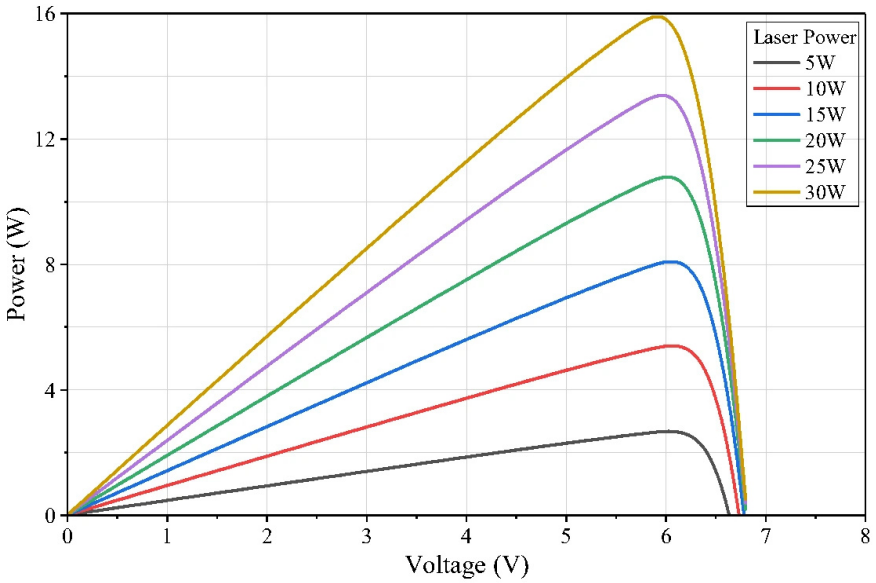
Operating points and curves: nominal wavelength, 25°C case temperature. Optical input is power at the receiver, not transmitter output or end-to-end electrical output.

Optical input / W	Electrical Pmpp / W	Vmpp / V	Impp / A
10	5.40	6.05	0.893
20	10.79	6.05	1.784
30	15.92	5.91	2.693

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.

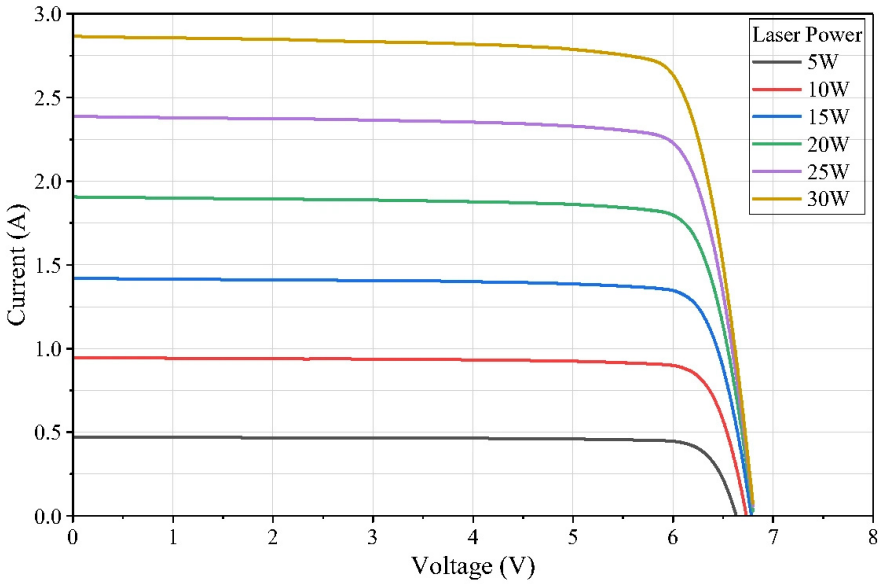
Typical characteristic curves

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