# 808 nm / 2.5 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-808-2.5W-SMA905 |
| Input wavelength | 800–840 nm |
| Typical operating points | 2.74 W @ 5 W optical input / 6.1 V / 0.452 A |
| Maximum optical input (adequate cooling required) | 8 W |
| Operating case temperature | −40…+85 °C |

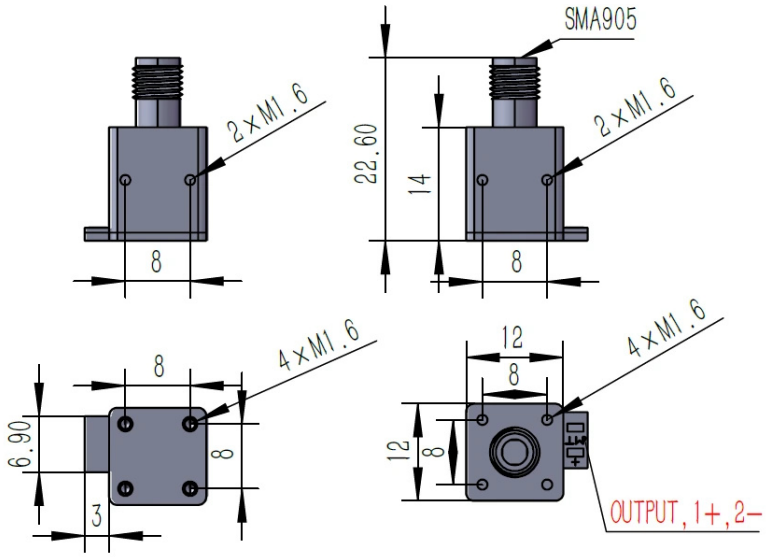
## Applications & selection

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

| | |
|---|---|
| 1 | + |
| 2 | − |

## 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 | — | — | 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

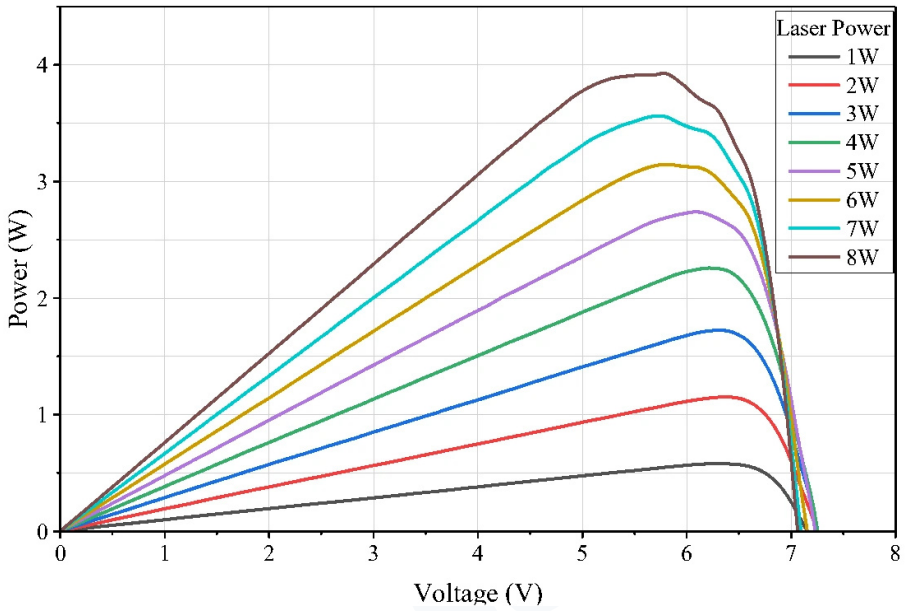
Operating points and curves: nominal wavelength, 25°C case temperature. Optical input is power at the receiver, not transmitter output or end-to-end electrical output.

| Optical input / W | Electrical Pmpp / W | Vmpp / V | Impp / A |
|---|---|---|---|
| 1 | 0.58 | 6.4 | 0.091 |
| 3 | 1.72 | 6.3 | 0.273 |
| 5 | 2.74 | 6.1 | 0.452 |

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.

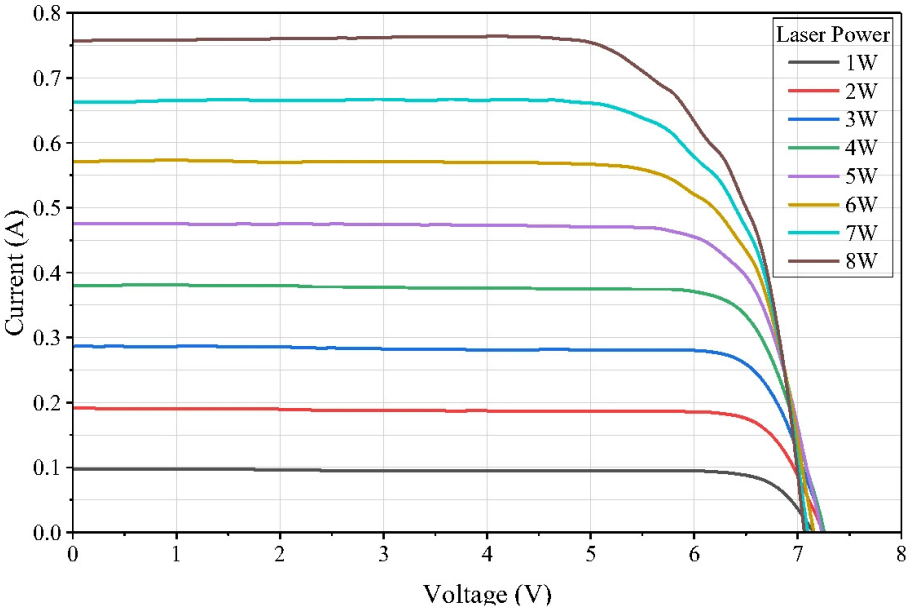
# Typical characteristic curves

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