

808 nm / 15 W Optical Power Receiver

Power over fiber | SMA905 multimode optical input

A packaged photovoltaic receiver converts incident laser light into electrical power. Output depends on optical input, beam coupling, case temperature and thermal management. The receiver output is not an inherently regulated system supply.

Electrical interface: six-pin connector for the illustrated configuration. Confirm mating connector, pinout and installation drawing before integration. Bottom heat sinking is required.

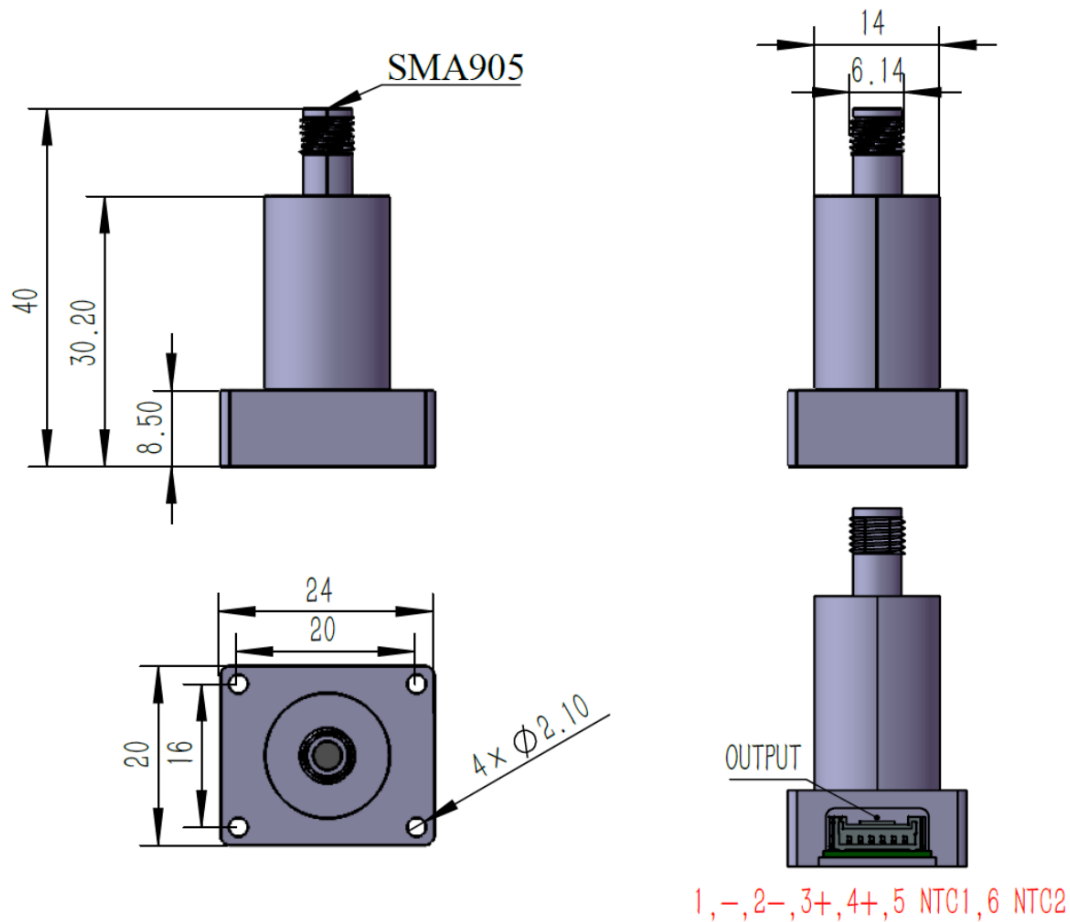
Parameter	Configuration / limit
Recommended input spectrum	800-840 nm; typical 808 nm
Operating case temperature	-40 to +85 °C
Storage temperature	-40 to +85 °C; typical 25 °C
Relative humidity	5-85%
Maximum optical input, with sufficient heat sinking	30 W
Fiber core diameter	40-400 μm reference range
Numerical aperture	0.17-0.22; typical 0.22
Fiber length	Application-specific

Typical operating data: 808 nm optical input; case temperature 25 °C. Values below are maximum-power-point data, not guaranteed regulated outputs.

Optical input	Electrical Pmpp	Voltage at Pmpp	Current at Pmpp
10 W	5.40 W	6.05 V	0.893 A
20 W	10.79 W	6.05 V	1.784 A
30 W	15.92 W	5.91 V	2.693 A

Mechanical Configuration

Dimensions in mm | configuration example



Drawing scope: six-pin version with bottom heat-sink mounting. Connector part number and pinout are confirmed with the ordered configuration.

Internal temperature sensor	Reference values
NTC resistance	10 kΩ; B = 3930 K
Sensor temperature range	-40 to +150 °C; application-specific. This is not the receiver operating-case rating.

Use adequate heat sinking to prevent the operating-case temperature limit from being exceeded. Protect the fiber with a sleeve or ferrule during handling. Confirm fiber coupling, mounting, load and electrical interface before integration.

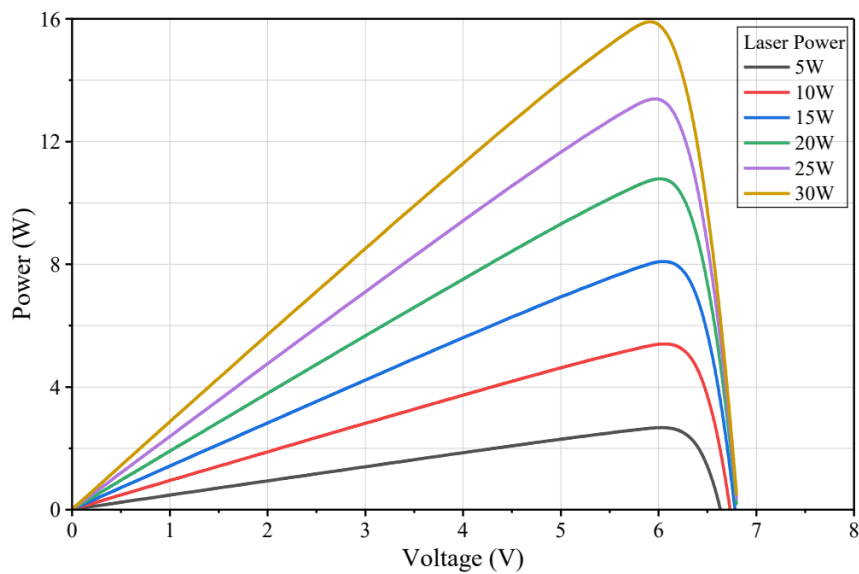
Technical data apply to the stated configuration and conditions. Final delivery requirements are defined by the agreed technical specification.

Typical Performance Curves

808 nm | 25 °C | reference characteristics

Curves illustrate the referenced receiver configuration under the stated conditions. They do not establish identical performance for a different wavelength, package or interface version.

Power-voltage characteristic



Current-voltage characteristic

