

**OT-100**

**OT-100  
High Speed Position  
Sensing Amplifier**



The OT-100 High Speed Position Sensing Module contains a fully packaged SiTek Electro Optics Signal Processing Circuit (SPC) in a convenient and durable package.

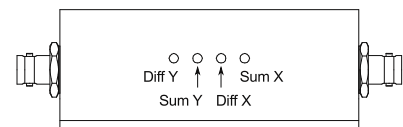
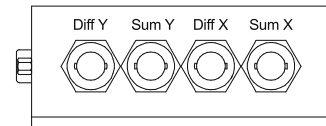
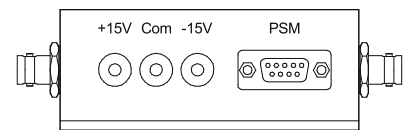
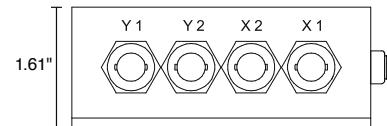
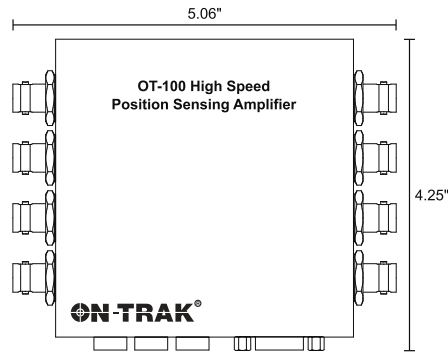
The OT-100 is designed to output bipolar voltages representing the position and intensity of a light spot on the PSD at bandwidths of up to 400 kHz. BNC outputs allow simple and fast connection to voltmeters and oscilloscopes. Banana jacks are provided for easy connection to most common power supplies. Plug and play connection to PSM modules and PSDs are made via the DB9 input and supplied DB9 cable.

**Features**

- DC to 400 kHz bandwidth response
- Dynamic range 25 $\mu$  to 300  $\mu$ W (635 nm)
- BNC output voltages: Amplified X<sub>1</sub>, X<sub>2</sub>, Y<sub>1</sub> and Y<sub>2</sub>  
Differential X and Y  
SUM X and Y
- Adjustable SUM and differential offsets
- $\pm$  15 volt input (nominal)
- DB9 PSM input (cable included)
- Compatible with silicon linear and silicon duolateral PSDs

### Specifications

Transimpedance gain (V/A)	10 <sup>5</sup>	Bandwidth	DC - 400 kHz
Input voltage (max)	±18 V	Slew rate	13 V/μS
Input voltage (nominal)	±15 V	Voltage input connectors	4mm banana
Input current (max)	23 mA	Output connectors	BNC (f)
Output voltage (nominal)	± 12V	PSD input connector	DB9 (f)
Output noise	3 mV p-p	Weight	24 ounces



#### PSM (DB9) Pinout

<b>1</b>	X <sub>1</sub>
<b>2</b>	X <sub>2</sub>
<b>3</b>	Y <sub>1</sub>
<b>4</b>	Y <sub>2</sub>
<b>5</b>	NC
<b>6</b>	NC
<b>7</b>	NC
<b>8</b>	NC
<b>9</b>	NC