

## Polarization Insensitive Fiber Input / Free Space Output Isolators for Pulsed <30W Yb:Fiber Lasers



Applications:	Features:
<ul style="list-style-type: none"> <li>• Laser marking</li> <li>• Laser engraving</li> <li>• Micro-machining &amp; trimming</li> </ul>	<ul style="list-style-type: none"> <li>• Rugged, environmentally hardened assembly</li> <li>• Maintains excellent beam quality of fiber lasers</li> <li>• Optional beam expanding telescopes available</li> </ul>

Part No. (Model) <sup>a</sup>	110-10184-0001 (OI-30-Yb-6)	190-11217-0002 (OI-30-Yb-25)	110-10184-0002 (OI-30-Yb-20)	110-10206-000F (CUSTOM)
Fiber type	Corning HI-1060	20/125	20/250	Customer specified
Fiber NA	0.13	0.10	0.08	Customer specified
Power handling	30W	30W	30W	30W
Center wavelength $\pm 15\text{nm}$	1064nm	1064nm	1064nm	1064nm
Peak power	n/a	20kW	20kW	20kW
$M^2$	$<1.2$	$\leq 2.0$	$\leq 2.0$	Contact EOT
Output beam dia.	0.4 – 0.8mm	0.6 – 1.2mm	1.0mm	1.3mm (max.)
Ellipticity	$>90\%$	$>85\%$	$>85\%$	Contact EOT
Full angle divergence	$<10\text{mrad}$	$<10\text{mrad}$	$<10\text{mrad}$	Contact EOT
Pointing accuracy	$<2\text{mrad}$	$<2\text{mrad}$	$<2\text{mrad}$	$<2\text{mrad}$
Insertion loss (dB)	0.5TYP- 0.7MAX.	0.5TYP- 0.7MAX.	0.5TYP- 0.7MAX.	Contact EOT
Isolation (10-50°C)	$>22\text{dB}$	$>22\text{dB}$	$>22\text{dB}$	$>22\text{dB}$
Isolation (23°C)	$>27\text{dB}$	$>27\text{dB}$	$>27\text{dB}$	$>27\text{dB}$
Return Loss	$<-47\text{dB}$	$<-50\text{dB}$	$<-50\text{dB}$	Contact EOT
Fiber length	3m	3m	3m	Contact EOT
Reverse power handling	100% @5min.	100% @5min.	100% @5min.	100% @5min.
Operating temperature	10-60°C	10-60°C	10-60°C	10-60°C
Storage humidity (non-condensing)	90%	90%	90%	90%
Beam expanding telescope	Various available	Various available	Various available	Various available
Fiber protective sleeve <sup>b</sup>	Armor cable	Armor cable	Armor cable	Armor cable

Notes:

- a. Product specifications and pricing subject to change without notice.
- b. Physically dangerous levels of radiation can be associated with fiber breaks when used at high power levels. If isolator is purchased without armor cable, the customer accepts all liability and responsibility for any damages and/or personal injury due to fiber breaks or other non-conformance of the product.