

**OPEN PATH (OPX) HEAD ASSEMBLY  
ISA DATA SHEET**



<b>General</b>	1	Manufacturer	Boreal Laser Inc.
	2	Analyzer Model No.	Not Selected - Open Path (OPX) Head Requires a GasFinder3 based Analyzer to Operate
	3	Measurement Head Model No.	Open Path (OPX) Head Assembly (e.g. BL-__-OPX-__-__)
	4	Warranty Period	10 years on Laser (Light Source) and 3 years Full Warranty
<b>Open Path (OPX) Measurement Head</b>	5	Optical Configuration	Transceiver and Retro-Reflector (Mono-Static)
	6	Assembly Composition	OPX Head, Alignment Scope, Rain/Dust Hood, and X-Y Alignment Mount
	7	Assembly Weight	5.2 kg (11.5 lbs)
	8	Assembly Dimension (LxWxH)	457 x 229 x 140 mm (18 x 9 x 5.5 inches)
	9	Physical Configuration	Remote from Analyzer (GasFinder3-MC) via Fibre Optic and CAT6/5e Cabling
	10	Mounting Hardware Configuration	Bottom mount with one (1) 3/8" - 16 and four (4) 0.281" - thru holes
	11	Maximum Distance to Analyzer	Up to 300m of Single Mode Fibre and Shielded CAT6/5e Cabling (10m Increments)
	12	Enclosure Material	6061 Anodized Aluminium
	13	Area Classification	(A)Ex ib IIC T5 Tamb <70°C Gb (Equivalent to Class 1 Div/Zone 1 and Groups A,B,C,D)
	14	Method of Protection	Intrinsic Safety "ib" & "Gb" as per IEC 60079-11
	15	Temperature (OPX Head Enclosure)	-45 to 70°C (-49 to 158°F)
	16	Temperature (Laser Beam)	-45°C to +150°C (-49 to +300°F) Active Measurement Path / Process
	17	Beam Divergence	0.05° / 0.9 milliradian (milliradian x path length (m) = laser dot size (mm))
	18	Window Material	Lexan, Mylar, or Teflon
	19	Power	Non-powered (Passive)
20	Cable Entry Size	3/4" (M20) for Fibre and CAT6/5e Cabling	
21	Cable Gland	Included as part of Measurement Head Assembly	
22	Cable Connections	Single Mode Fibre (FC/APC) and CAT6/5e (RJ-45) - Included in Assembly	
23	Dual Gas Configuration #1	All gases except O2, CO2L, COL, CO2UL can share an OPX Head with a Second Gas	
24	Dual Gas Configuration #2	CO2L, COL, CO2UL can share Open Path (OPX) Head	
25	Dual Gas Configuration #3	O2 always requires a dedicated Open Path (OPX) Head	
<b>Retro-Reflector</b>	26	Retro Enclosure Material	304 Stainless Steel or FRP Fiberglass
	27	Retro Enclosure Window Material	Lexan, Mylar, Teflon (Gas/Application Dependent)
	28	Retro-Reflector Temperature	-45°C to +120°C (-49°F to 248°F) with Cornercube Retro-Array
	29	Retro Enclosure Heater	24 VDC @ 25W or 110-240 VAC @ 50W
	30	Retro Enclosure Thermostat	40°C Thermostat
	31	Heater/Thermostat Classification	Class 1 Div 2 (Required to be connected as per local electrical code)
	32	Retro Enclosure Cable Entry	None
	33	Retro Enclosure Cable Glands	Supplied by others (as per local electrical standards)
	34	Retro Heater Termination	Mounted with flying leads (to be installed as per local electrical standards)
	35	Retro Array (Cornercube)	63.5 mm (2.5") Cornercube at 30 arc-seconds
	36	Path Length Ranges (Retro-Arrays)	0.5-5 (G), 5-20m (M), 20-125m (5), 20-200m (7), 20-350m (14), 20-500m (21)
	37	Rain/Dust Hood	Included
<b>Recommended Accessories</b>	38	Alignment Kit	BL-OAK-MC
	39	I-Beam Mounting Structure	BL-IMS
	40	Response Cell	BL-RC3-__-__ (Any two gases except HF)
	41	In-Line Response Cell	BL-ILRC-__ (HF, HCN, NH3, or CH4)
42	Commissioning and Spares Assembly	BL-CASA	
<b>Latest Revision</b>	45	1/07/21	