

**INSERTABLE (IPX) PROBE
ISA DATA SHEET**



General	1	Manufacturer	Boreal Laser Inc.
	2	Analyzer Model No.	Not Specified.
	3	Measurement Head Model No.	Insertable (IPX) Probe Assembly (e.g. BL-__-IPX-__)
	4	Warranty Period	3 years Full Warranty
Cabling Options	5	Cabling Type	Single Mode Fibre Optic (FC/APC) and Shielded CAT6/5e Cabling (RJ45)
	6	Allowable Cable Lengths	5 - 300 m (15 - 1,000 ft) available in 10m (30 ft) Increments (See Target Gas Requirements)
	7	Fiber Optic Cabling Specification	SMF-28 Family of Fibres (SFM-28e, SFM-28e+, SFM-28 Ultra)
	8	Fiber Optic Connector Specification	Threaded Fiber Connector / Angled Polished Connector (FC/APC) - Green Boot
	9	CAT6/5e Cabling Specification	CAT6 (625MHz), 4-Bonded Pair, F/UTP-Foil Shield, 23 AWG Solid Bare Conductors
	10	CAT6/5e Connector Specification	RJ45 (T-568A) Shielded Connector
	11	5-20 m (15-60 ft) Cable Lengths	3/4" Flexible Conduit with 3/4" Connectors
	12	30-300m (90-1,000ft) of Cable - Option #1	Standard PVC Jacketing to be ran in User supplied Conduit or Cable Tray
	13	30-300m (90-1,000ft) of Cable - Option #2	Armoured (Aluminium) and PVC Jacketed - 17.3mm (0.680") Fiber & 13mm (0.511") CAT6
	15	Measurement Head Junction Box Material	Poly Vinyl Chloride (PVC) with Removeable Front Cover
	16	Measurement Head Junction Box Size	175 x 175 mm (6.9 x 6.9 inches) with four (4) 7.11 (0.280") Thru Holes for Mounting
	17	Measurement Head Junction Box Fittings	Free Floating Bulkhead Connectors for Fiber Optic (FC/APC) and CAT6/5e (RJ45)
	Insertable (IPX) Probe	18	Optical Configuration
19		Assembly Composition	Insertable Probe, 3" 150# ANSI flange, Length 0.25-1.0m
20		Assembly Weight	15 kg (33 lbs)
21		Assembly Dimension (LxWxH)	520-1270 x 229 x 140 mm (20 - 50 x 7 x 7 inches)
22		Insertable Probe Dimension (LxWxH)	325-1075 x 95 x 95 mm (12.8 - 42 x 3.75 x 3.75 inches)
23		Physical Configuration	Remote from Analyzer (GasFinder3-MC) via Fibre Optic and CAT6/5e Cabling
24		Mounting Hardware Configuration	ANSI 3" 150# Flange Mounting Hardware Included
25		Maximum Distance to Analyzer	Up to 300m of Single Mode Fibre and Shielded CAT6/5e Cabling (10m Increments)
26		Enclosure Material	316 SS Stainless Steel
27		Area Classification	(A)Ex ib IIC T5 Tamb <70°C Gb (Equivalent to Class 1 Div/Zone 1 and Groups A,B,C,D)
28		Method of Protection	Intrinsic Safety "ib" & "Gb" as per IEC 60079-11
29		Temperature	-55 to +120°C (-67 to 248°F)
30		Temperature (Laser Beam)	-55°C to +120°C (-67 to +248°F) Active Measurement Path / Process
31		Pressure - Insertable (IPX) Probe	50 to 200 kPa Absolute (7.25 to 29 psia)
32		Process Pressure (Laser Beam)	50 to 200 kPa Absolute (7.25 to 29 psia)
33		Beam Divergence	32mm (1 1/4") @ 1m (3.3ft) = (32 milliradian x path length (m) = laser dot size (mm))
34		Window Material	Sapphire
35		Power	Non-powered (Passive)
36		Cable Entry Size	3/4" (M20) for Fibre and CAT6/5e Cabling
37		Cable Gland	Included as part of Measurement Head Assembly
38		Cable Connections	Single Mode Fibre (FC/APC) and CAT6/5e (RJ-45) - Included in Assembly
39		Dual Gas Configuration #1	Any two gases except O2, CO2L, COL, CO2UL can share an Insertable (IPX) Probe
40		Dual Gas Configuration #2	CO2L, COL, CO2UL can share Insertable (IPX) Probe
41		Dual Gas Configuration #3	O2 always requires a dedicated Insertable (IPX) Probe
42		Retro Enclosure Material	316 SS Stainless Steel, PTFE Teflon
43		Retro Enclosure Window Material	Sapphire, Teflon, No Window
44		Retro-Reflector Temperature	-55°C to +120°C (-67°F to 248°F) with IMOS Retro Reflector
45		Retro Enclosure Cable Entry	None
46		Retro Enclosure Cable Glands	N/A
47		Retro Array (IMOS or Grey Tape)	50.8 mm (2") IMOS Retro Reflector
48	Path Length Ranges (Retro-Arrays)	0.25-1m Probe	
Recommended Accessories	49	Alignment Kit	BL-OAK-MC
	50	In-Line Response Cell	BL-ILRC-__ (HF, HCN, NH3, or CH4)
	51	Commissioning and Spares Assembly	BL-CASA
	52	Calibration Certificate Extension	BL-QDRP
	53	120-220 VAC Power Supply	BL-HAPS or BL-HAPS-S
Latest Revision	54	2/03/21	