

**EXTRACTIVE MEASUREMENT (EMX) CELL
ISA DATA SHEET**



General	1	Manufacturer	Boreal Laser Inc.
	2	Analyzer Model No.	Not Specified.
	3	Measurement Head Model No.	Extractive Measurement Cell (EMX) Assembly (e.g. BL-__-EMX-__)
	4	Warranty Period	10 years on Laser (Light Source) and 3 years Full Warranty
Extractive Measurement (EMX) Cell	5	Optical Configuration	Transceiver and Retro-Cover (Mono-Static)
	6	Assembly Composition	Window Fixtures, Transceiver and Retro-Reflector Covers, 1"FNPT and 1/4" FNPT Connections For Measurement
	7	Assembly Weight	5.2 kg (11.5 lbs)
	8	Assembly Dimension (LxWxH)	Variable Dependent on Application
	9	Physical Configuration	Remote from Analyzer (GasFinder3-MC) via Fibre Optic and CAT6/5e Cabling
	10	Mounting Hardware Configuration	N/A
	11	Maximum Distance to Analyzer	Up to 300m of Single Mode Fibre and Shielded CAT6/5e Cabling (10m Increments)
	12	Optics Enclosure Material	6061 Anodized Aluminium
	13	Measurement Cell Material	316 Stainless Steel Standard, Custom Materials Available Upon Request
	14	Area Classification	(A)Ex ib IIC T5 Tamb <70°C Gb (Equivalent to Class 1 Div/Zone 1 and Groups A,B,C,D)
	15	Method of Protection	Intrinsic Safety "ib" & "Gb" as per IEC 60079-11
	16	Process Connections	1/4" FNPT
	17	EMX Cell Connections	1" FNPT for 1" NPT Pipe
	18	Temperature (EMX Cell Enclosure)	-55 to 120°C (-67 to 248°F)
	19	Temperature (Laser Beam)	-55°C to +150°C (-67 to +300°F) Active Measurement Path / Process
	20	Process Pressure	50 to 200 kPa Absolute (7.25 to 29 psia)
	21	Beam Divergence	32mm (1 1/4") @ 1m (3.3ft) = (32 milliradian x path length (m) = laser dot size (mm))
	22	Window Material	Sapphire
	23	Power	Non-powered (Passive)
	24	Cable Connections	Single Mode Fibre (FC/APC) and CAT6/5e (RJ-45) - Included in Assembly
	25	Dual Gas Configuration #1	Any two gases except O2, CO2L, COL, CO2UL can share an Extractive (EMX) Cell
	26	Dual Gas Configuration #2	CO2L, COL, CO2UL can share a Extractive Measurement (EMX) Cell
	27	Dual Gas Configuration #3	O2 always requires a dedicated EMX Cell
	28	Retro Enclosure Material	6061 Anodized Aluminium
	29	Retro Enclosure Window Material	Sapphire
	30	Retro-Reflector Temperature	-55°C to +120°C (-67°F to 248°F) with Cornercube Retro-Array
	31	Retro Enclosure Cable Entry	None (Passive)
	32	Retro Array (IMOS)	50.8 mm (2") IMOS Retro
33	Path Length Ranges (Retro-Arrays)	Path Length depends on Detectable Range	
Recommended Accessories	34	Alignment Kit	BL-OAK-MC
	35	In-Line Response Cell	BL-ILRC-__ (HF, HCN, NH3, or CH4)
	36	Commissioning and Spares Assembly	BL-CASA
	37	Calibration Certificate Extension	BL-QDRP
Latest Revision	38	120-220 VAC Power Supply	BL-HAPS or BL-HAPS-S
	39	1/09/21	