



200 Series OPACITY MONITOR SYSTEM

The OPAL 200 series opacity monitoring systems are manufactured in Australia, to the design specifications of the revised USEPA Performance Specification 1 and the associated manufacturing standard ASTM D 6216-98. They are fully compliant with the requirements for industrial air emissions monitoring of the environmental regulators in most Asian and Pacific Rim countries.

OPACITY MONITORING SYSTEMS

*** USEPA (PS-1) COMPLIANT**

*** AUSTRALIAN DESIGNED**

*** AUSTRALIAN BUILT**



KEYPAD TEST & CONTROL



SWING ACCESS FOR SERVICE



TTL OPTICAL ALIGNMENT

- *Alignment flanges, weather covers and air purge inlets as standard.*
- *Purpose built factory calibration and test facilities to ASTM D 6216-98.*
- *Double pass optics using high power modulating LED light source.*
- *Reduce maintenance down time with simple to service system design.*

OPAL 200 Series Opacity Monitoring System - Technical Specifications

OPAL 200 Control Unit

Enclosure
Ambient Temperature
Power Supply
Display
Top Line Display
Lower Line Display
Operator Indicating LED's
Outputs – Channel 1
 - Channel 2
Outputs - Relay
Alarms

Auto Calibration

IP65 weatherproof
-10 to +50 Deg C
120 or 240vac, 50/60Hz, 125va
Alphanumeric, two line x 16 character x 4mm LCD, backlit
Opacity %, instantaneous or averaged, Resolution 0.1%
Selectable – Lens Dirt %, alarm & system status, Optical density or mg/m³
Run, Alarm, Setup
Linearised Opacity % - 4-20mA, isolated, scaleable span 10 – 100% opacity
Optical density or mg / m³ - 4-20mA, isolated, scaleable
Two (2) programmable SP-NC, 0.5A at 24vdc (50vac / 30vdc maximum)
Optical head system FAIL, Blower FAIL, Service mode, Lens dirt HIGH,
Opacity level HIGH, Calibration test FAIL
Automatic - programmable 1 to 24 hour, or manual start from control unit, transceiver or remote.

OPAL 200 - Optical

Enclosure
Power supply
Installation
Path Length
Optical System
Alignment
Lens Protection
Ambient Temperature
Process Temperature
Temperature stability
Ambient Light Immunity
Peak / Mean Spectral Response
Angle of View
Angle of Projection
Response Time
Zero & Span Test
Maximum cable length
Options

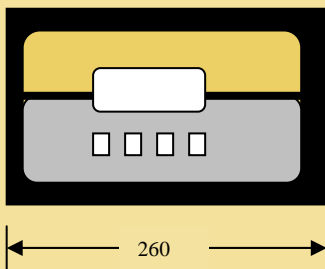
IP65 weatherproof with lift-off weather covers supplied as standard.
15 vdc 300mA, provided by control unit.
Via flanges: 205mm diameter, 4 x 18 mm holes on 165mm pcd, 80 nominal bore.
500mm to 10000mm.
Double Pass system with high power LED light source, modulated.
TTL (thru-the-lens) view – 4 adjustment bolts on transceiver flange spool, +/- 4 degrees.
Air blower inlets on flanged air purge spools. Optional adaptors for plant instrument air.
-10 to +50 ° C
Up to 400 ° C standard.
Less than 0.5% opacity from 10 - 50 ° C
Nil effect from sunlight or artificial light sources.
515 to 585 nm, less than 10% of peak response outside 400 to 700 nm.
<4.0° from optical axis.
<4.0° from optical axis.
< 2 seconds, to 90% of actual value.
Manual test operation via control unit or transceiver keypad.
100 metres.
Stack mounted filtered air blower assembly, with weatherproof cover set.
Air purge assembly for instrument air connection.
Calibration audit module and filter set.

Transceiver (Control)

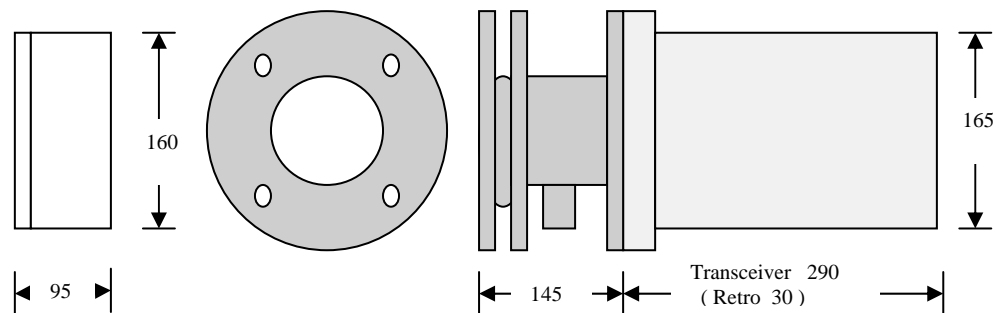
Display
Control

2 line, 32 character, alphanumeric LCD display, backlit
4 push button operation - Select DISPLAY, TEST, INSTALL, and FACTORY modes
Local keypad control of calibration, system settings, automatic and manual testing

CONTROL UNIT (3.2Kg)



TRANSCIEVER (6.6Kg) / RETROREFLECTOR (2.3Kg)



Website:

www.opalenvironmental.com.sg

Sales & Service:

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