



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Request for Quotation
 27 - Miscellaneous

Proc Folder: 388426

Doc Description: Continuous Sulfur Dioxide (SO2) Analyzers DAQ18-4

Proc Type: Central Purchase Order

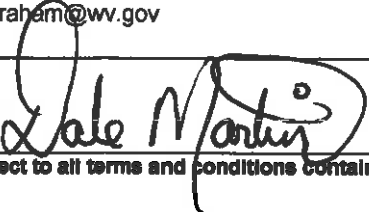
Date Issued	Solicitation Closes	Solicitation No	Version
2017-11-15	2017-12-07 13:30:00	CRFQ 0313 DEP1800000009	1

BID RECEPTION LOCATION
 BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR
 Vendor Name, Address and Telephone Number:
 Thomas Scientific LLC
 1654 High Hill Road
 Swedesboro, NJ 08085
 (321) 266-3780

12/07/17 09:04:09
 WV Purchasing Division

FOR INFORMATION CONTACT THE BUYER
 Brittany E Ingraham
 (304) 558-2157
 brittany.e.ingraham@wv.gov

Signature X  FEIN # 61-1853692 DATE 12/05/2017

All offers subject to all terms and conditions contained in this solicitation

Request for Quotation

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Environmental Protection, Division of Air Quality to establish a contract for the one-time purchase of three (3) Continuous Sulfur Dioxide (SO2) Analyzers, Teledyne Advanced Pollution Instrumentation model T100 or Equal, per the bid requirements, specifications, terms and conditions attached to this solicitation.

INVOICE TO		SHIP TO	
ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY 601 57TH ST SE CHARLESTON WV25304 US		ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY 131A PENINSULA ST WHEELING WV 26003 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Continuous Sulfur Dioxide (SO2) Analyzers	3.00000	EA	\$15,807.00	\$47,421.00

Comm Code	Manufacturer	Specification	Model #
41113100	Thermo Scientific	43iQ	Sulfur Dioxide Analyzer, Teledyne T100 Equal Product, 100-120 VAC, 50/60 Hz (NA), - Communications - Serial, Analog, and Digital, - Case Configuration - No Zero/Span Valves, Includes Warranty 1 Year Parts/labor

Extended Description :

Three (3) Continuous Sulfur Dioxide (SO2) Analyzers, Teledyne Advanced Pollution Instrumentation Model T100 or Equal

DEP1800000009	Document Phase Final	Document Description Continuous Sulfur Dioxide (SO2) Analyzers DAQ18-4	Page 3 of 3
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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Thermo Scientific 43iQ

Sulfur Dioxide Analyzer—pulsed fluorescence



The Thermo Scientific™ 43iQ Sulfur Dioxide (SO₂) Analyzer utilizes pulsed fluorescence technology to measure the amount of sulfur dioxide in the air.

The pulsing of the UV source lamp serves to increase the optical intensity whereby a greater UV energy throughput and lower detectable SO₂ concentration are realized.

Reflective bandpass filters, as compared to commonly used transmission filters, are less subject to photochemical degradation and more selective in wavelength isolation. This results in both increased detection specificity and long term stability.



Non-Stop Intelligence

- Predictive Diagnostics
- Proactive Communication
- Personal Device Connectivity

The Thermo Scientific iQ Series Gas Analyzer provides a smart environmental monitoring solution designed for reliability, easy operation and proactive maintenance. Get more control over your instrument's performance, costs, workflow and data availability.



The iQ companion app for the iQ Series Gas Analyzer delivers the ultimate in ease of use and smart engineering. The iQ app allows for remote monitoring of iQ gas analyzers, simplified ways of contacting us and instant access to product resources.

Download the iQ app at thermofisher.com/iQapp

ThermoFisher
SCIENTIFIC



Thermo Scientific 43iQ Sulfur Dioxide Analyzer

Specifications	
Range	0-10 ppm, 0-25 mg/m ³
Extended range	0-100 ppm, 0-250 mg/m ³
Zero noise	1.0 ppt RMS (10 second averaging time) 0.5 ppt RMS (50 second averaging time) 0.25 ppt RMS (200 second averaging time)
Detection limit	2 ppt (10 second averaging time) 1 ppt (50 second averaging time) 0.25 ppt (200 second averaging time)
Zero drift	±0.5 ppt (24 hour)
Span drift	±0.5% full scale (24 hour)
Response time	60 seconds (10 second averaging time) 110 seconds (50 second averaging time) 330 seconds (200 second averaging time)
Linearity	±1% full scale
Flow rate	0.5 lpm (standard)
Interferences (EPA level)	Less than lower detection limit except for the following: NO x < 3 ppt, M-xylene < 1 ppt, H ₂ O < 2% of reading
Operating temperature	0°-110°C
Power requirements	100-240 VAC 50/60Hz, 275 Watts
Size and weight	24.31 (D) x 16.75 (W) x 8.72 (H) (9.13 L) 304 mm (D) x 425.40 mm (W) x 221.44 mm (H) 15.8kg
Analog I/O	4 isolated voltage inputs 0-10 V 6 isolated analog voltage outputs, with 4 selectable ranges 0 isolated analog current outputs, with 2 selectable ranges
Digital I/O	16 digital inputs (TTL) 8 isolated driver outputs 16 digital reed relay contact outputs
Serial ports	1 RS-232/485 port 1 RS-485 external addressable port
Other ports	3 Full speed USB ports (one in front, two in rear) 1 Gigabit ethernet port
Communication protocols	MODBUS, spanning
Approvals and certifications	CE, TUV-SUD Safety, US EPA, EISA-D186-060

Ordering information

43iQ Sulfur Dioxide Analyzer

Choose from the following configuration options to customize your own 43iQ Analyzer

1. Power Cord

A = 100-120 VAC, 50/60 Hz (NA)

B = 220 VAC, 50/60 Hz (CHN)

C = 220 VAC, 50/60 Hz (EU)

2. Communications

N = No I/O

A = Serial RS232/RS485

B = Analog or Digital

C = Serial, Analog and Digital

3. Case Configuration

N = No zero/span valves

A = Internal zero/span valves

B = Internal zero/span valves, internal permeation oven

Your Order Code: 43iQ -

