

TruSpec® Series Sulfur Add-On Module Specification Sheet

Instrument Range* @ 350 mg	0.001 to 20%
Precision (Sulfur)	5 ppm or 1% RSD (whichever is greater)
Nominal Sample Weight	350 mg for coal
Analysis Time	60 to 120 seconds (typical)
Detection Method	Infrared absorption
Chemical Reagents	Magnesium Perchlorate (Anhydron)
Gas Requirements	Oxygen, 99.5% pure, 40 psi (2.8 bar) ±10% 3.5 lpm, 1.0 lpm purge
Regulator Requirements	Oxygen, 0 to 125 psi (0 to 8.6 bar); CGA 540, 7/8-14 Male R.H.
Furnace	600 to 1450°C ±1% of setpoint; Horizontal resistance-type with open end
Operational Control	Windows®-based software for PC on TruSpec
Physical Dimensions†	
Height:	31-inch (79 cm)
Width:	13-inch (33 cm)
Depth:	26-inch (66 cm)
Total Shipping Weight	117 lb. (53 kg)
Electrical Requirements	230 V~ (±10%; at max load), 50/60 Hz, single phase, 25 A, 19,700 BTU/hr

Part Numbers

TRNSNC	TruSpec System for Nitrogen and Sulfur Determination; Includes PC, Monitor, Windows®-based software, module, and host system
TRNSSLC	Same as TRNSNC above, with Sulfur Module Autoloader
TRSCNSC	TruSpec System for Carbon, Nitrogen, and Sulfur Determination; Includes PC, Monitor, Windows®-based software, module, and host system
TRSCNSLC	Same as TRSCNSC above, with Sulfur Module Autoloader
TRSCHNSC	TruSpec System for Carbon, Hydrogen, Nitrogen, and Sulfur Determination; Includes PC, Monitor, Windows®-based software, module, and host system
TRSCHNSLC	Same as TRSCHNSC above, with Sulfur Module Autoloader
TRSSADD	TruSpec Sulfur Add-On Module for upgrading TruSpec Systems (SN >3486); Includes Windows®-based software, module, and necessary components for mating module to an existing system, (no PC or Monitor)
TRSSADDL	Same as TRSSADD above, with Sulfur Module Autoloader

Optional Accessories

621-192	Dual Monitor Add-On Kit
528-203-250	Combustion Boats
502-434	Coal 0.75% Sulfur Reference Material
620-400-110	50-position Autoloader for Sulfur Module; for SN 4052 and higher
620-400-120	50-position Autoloader for Sulfur Module; for SN 4001 thru 4051

*Adjusting sample size may extend instrument range.

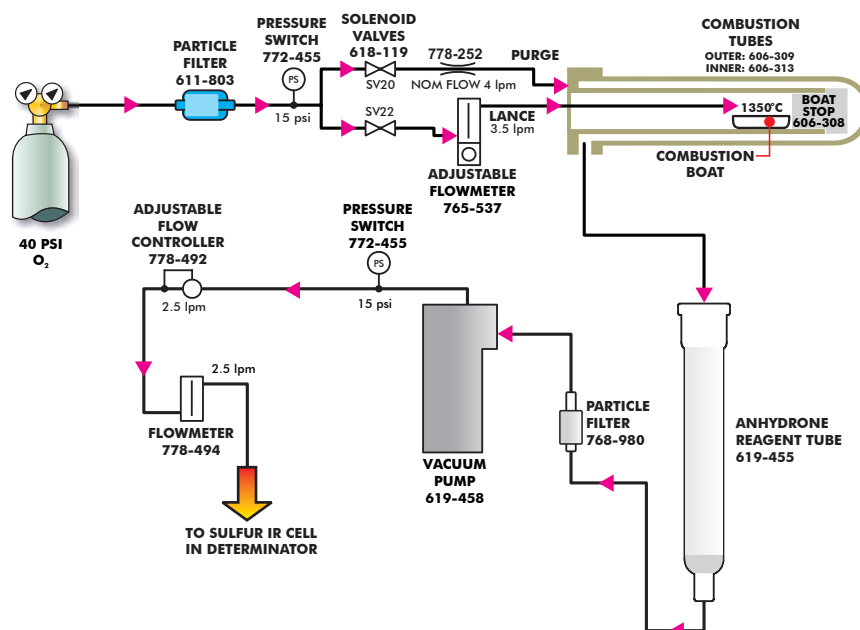
†Allow a 6-inch (15 cm) minimum access area around all units.
V~ denotes VAC.



Theory of Operation

LECO offers a new **Sulfur Add-On Module** for the TruSpec® Series of Elemental Determinators. The add-on module provides sulfur analysis for any element combination of the TruSpec—N, CN, or CHN. A weighed sample is placed in a combustion boat and manually directed into a concentric, horizontal combustion tube. The evolved gases are swept through moisture removers on the module, and transferred to the detection area of the TruSpec. While the TruSpec and sulfur add-on module can be loading/analyzing/operating completely independent of each other, the module requires the detection capabilities and PC offered on the TruSpec in order to complete the analysis. It can be retro-fitted to any existing TruSpec unit, and is operated manually.

Flow Diagram



Specifications and part numbers may change.
Consult LECO for latest information.

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