Allegato A

**Datasheet analizzatore ammoniaca** 

## PRODUCT SPECIFICATIONS

# Thermo Scientific Model 17i

## Ammonia Chemiluminescent Gas Analyzer

The Thermo Scientific™ Model 17*i*™ Ammonia Analyzer uses the light producing reaction of nitric oxide (NO) with ozone (O<sub>3</sub>) as its basic principle.

### **Features**

- Measurement of NH<sub>3</sub> as well as NO,
- NO<sub>2</sub>, NO<sub>x</sub> and Nt
- Replaceable NO<sub>2</sub> and NH<sub>3</sub> converter cartridges
- Unparalleled sensitivity and selectivity
- Automatic and manual modes
- Selectable time constants

### Introduction

The Thermo Scientific Model 17i Ammonia Analyzer uses the light producing reaction of nitric oxide (NO) with ozone (O<sub>3</sub>) as its basic principle. The instrument has three modes of operation, NO, NO<sub>x</sub> and Nt.

**Mode 1:** While operating in the NO mode, the sample is mixed with ozone in the reaction chamber. This reaction produces a characteristic luminescence with intensity proportional to the concentration of NO.



**Mode 2:** In the  $NO_x$  mode, the sample is passed through a molybdenum convertor which reduces any  $NO_2$  in the sample to NO. This is then transported to the reaction chamber where the sample is measured as  $NO_x$  ( $NO + NO_2$ ).

**Mode 3:** In the third mode, the Nt sample is passed through a stainless steel convertor where both the NO<sub>2</sub> and the NH<sub>3</sub> are converted to NO. This is then measured as Nt (NO + NO<sub>2</sub> + NH<sub>3</sub>).



Thermo Scientific™ Model 17i Ammonia Analyzer

The software subtracts NO from  $NO_x$  and  $NO_x$  from Nt and provides outputs of  $NO_2$  and  $NH^3$  respectively. The Model 17*i* analyzer can output  $NH^3$  along with NO,  $NO_2$ ,  $NO_x$ , and Nt to the display or electronic outputs.

This state-of-the-art iSeries gas analyzer also features:

- Ethernet port
- Flash memory for increased data storage
- Ethernet connectivity for remote access
- Off-site measurement downloads
- Easily programmable short-cut keys
- A large interface screen



## **thermo**scientific

## Thermo Scientific Model 17i Ammonia Analyzer

Thermo Scientific M	oder 177 Ammonia Analyzer	Ordering in	
Specifications		Model 17i An	
Preset ranges	0-0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, and 20 ppm 0-0.1, 0.2, 0.5, 1, 2, 5, 10, 20, and 30 mg/m <sup>3</sup>	Choose from to options to cus	
Extended ranges	0-0.2, 0.5, 1, 2, 5, 10, 20, 50, and 100 ppm	Ammonia Ana	
Z.Koriada rangoo	0-0.5, 1, 2, 5, 10, 20, 50, 100, and 150 mg/m <sup>3</sup>	1. Voltage op	
Custom ranges	0-0.05 to 100 ppm 0-0.1 to 150 mg/m³	A = 115 Vac 60 B = 220 Vac 5	
Zero noise	0.50 ppb RMS (120 second averaging time)	C = 220 Vac 6	
Lower detectable limit	1.0 ppb (120 second averaging time)	E = 115 Vac 50	
Zero drift (24 hour)	< 1 ppb	J = 100 Vac 50	
Span drift (24 hour)	+/-1% full scale	2. Internal ze	
Response time	120 seconds (10 second averaging time)	N = No zero/s	
Precision	+/-0.4 ppb (500 ppb range)	Z = Internal ze	
Linearity	+/-1% full scale	3 = 20 LPM C	
Sample flow rate	0.6 liters/min.	3. Ozone han	
Operating temperature	59° - 95° F (15° - 35°C)	D = Drierite sc	
Power requirements	100 vac, 115 vac, 220-240 vac +/-10% @ 50/60hz, 300W (analyzer) 600W (converter)	P = Permeatio	
Size and weight	16.75" (W) × 8.62" (H) × 23" (D), 60 lbs. (28 kg)	4. Optional I/	
	Analyzer: 29 lbs. (14 kg) converter	A = None (star	
Outputs	Selectable voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication (standard).	C = I/O expans 6 channels	
Odiputo	0-20 or 4-20 mA Isolated Current Output (optional)	Your Order C	
Inputs	16 Digital inputs (standard), 8 0-10Vdc analog inputs (optional)	Model 17i Am	
Available Options	Tefl on particulate filter, ozone particulate filter, rack mounts, rear extender		

**Ordering information** 

## mmonia Analyzer

the following configurations/ ıstomize your own Model 17i alyzer

#### ptions

60 Hz (standard)

50 Hz

60 Hz

50 Hz

50/60 Hz

#### ero/span

span assembly (standard)

ero span assembly

Compressor

### ndling

crubber (standard)

ion dryer

### 1/0

andard)

nsion board (4-20mA outputsels 0-10v inputs-8 channels)

## Code:

mmonia Analyzer

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