

FINAL INSPECTION RECORD

Aethalometer™
AE33

SERIAL NUMBER: S/N: AE33-S02-00192

ORDER NUMBER: 90 130 30 22

CUSTOMER: Sao Paulo

Aerosol

Installed components and accessories S/N

COMPONENT	TYPE	S.N. / batch	REM.
Computer	PCM 3353	PCM-3353Z-L0A1E	
RAM	512M SO-DDR400 200PIN 64x8	96SDI-512M400NN-1K	
Display	IDK		
CF card	8 GB		
Pump	KNF PM24814-86.1.2		
Power supply board	AE33 1 10	904	
Interconnection board	AE33 1 06	902	
Controller board	AE33 1 07	904	
Detector board	AE33 1 03	903	
LED driver board	AE33 1 05	902	
10ch LED source board	AE33 1 02	901	
Tape sensor boards	AE33 1 11	903	
Back panel board	AE33 1 08	904	
Front panel board	AE33 1 04	904	
LED board	AE33 1 12	902	
USB board	AE33 1 09	902	
PC board	AE33 1 01	903	
Inlet board	AE33 1 14	902	

COMPONENT	Version	REM.
Firmware	513	
Bootloader	221	
Software	1.1.0.0.	

System parameters

COMPONENT	Value	Unit
Sigma (370 nm)	18,47	m ² /g
Sigma (470 nm)	14,54	m ² /g
Sigma (520 nm)	13,14	m ² /g
Sigma (590 nm)	11,58	m ² /g
Sigma (660 nm)	9,89	m ² /g
Sigma (880 nm)	7,77	m ² /g
Sigma (950 nm)	7,19	m ² /g
ATN ₁₁ /ATN ₁₂	10/30	
C	1.57	

Performance test

PARAMETER	VALUE	MEASURED	CONFORMITY	REM.
Leakage	< 0.1	0.03		
Stability (1 s)	DBCI < 450	383		
Clean air (1 s)	DBCI < 550	393		
Indoor air	Sensitivity 1 ± 0.08	1	✓	

System electrical conformity test

PARAMETER	VALUE	MEASURED	CONFORMITY	REM.
PC	5 ± 0.1 V	5.1		
12V	12 ± 0.1 V	12.05		
5	5 ± 0.1 V	5.05		
24V LD	24 ± 0.1 V	23.9		
5V LD	5 ± 0.1 V	5.0		
BAT CLK	3.3 ± 0.1 V	3.3		
BAT PC	3.3 ± 0.1 V	3.3		
Resistance between the inlet grounding pin and		/	/	Extech METRAHIT BASE TRMS Digital multimeter
Top panel	< 0,1 Ohm	0.05		
Front panel		0.07		
Rear panel		0.06		
Chassis		0.05		

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ATN ₁₁ /ATN ₁₂	10/30	
C	1.57	

Performance test

PARAMETER	VALUE	MEASURED	CONFORMITY	REM.
Leakage	< 0.1	0.03		
Stability (1 s)	DBCI < 450	339		
Clean air (1 s)	DBCI < 550	338		
Indoor air	Sensitivity 1 ± 0.08	1		

System electrical conformity test

PARAMETER	VALUE	MEASURED	CONFORMITY	REM.
PC	5 ± 0.1 V	5.1		
12V	12 ± 0.1 V	12.05		
5	5 ± 0.1 V	5.05		
24V LD	24 ± 0.1 V	23.9		
5V LD	5 ± 0.1 V	5.0		
BAT CLK	3.3 ± 0.1 V	3.3		
BAT PC	3.3 ± 0.1 V	3.3		
Resistance between the inlet grounding pin and				Extech METRAHIT BASE TRMS Digital multimeter
Top panel	< 0,1 Ohm	1	1	
Front panel		0.05		
Rear panel		0.07		
Chassis		0.06		

System test				
PARAMETER	VALUE	MEASURED	CONFORMITY	REMARK
Tape advance length	36 ± 2 mm	34	✓	
Tape advance left (30 ft)	250 ± 50	✓		
Flow in (Fset=5 l)	4.75 ± 0.15 l/min	4.600		
Flow out (Fset=5 l)	5.0 ± 0.1 l/min	5.000		
F2 : F1	<0.45 - 5 LPM	0.41		
Filter batch #	341	B/L 06		

Spots:

(cut the tape and paste here)

Spot time and date:

30.1.14

TESTS PERFORMED BY: Vidmar

DATE: 5.2.14

Accessories specification			
DESCRIPTION	REQ.	PACKED	DETAILS
M4997; 3/8" OD Sample Inlet Tubing, static dissipative	3 m	✓	
Fittings	1 set	✓	
M8072; Cartridge filter – bypass	10	✓	
Flow calibration pad	1	✓	
Final Inspection record	1	✓	
Power supply cable (220/110 V)	1	✓	
AE33-FT ; Sample filter tape - 10m roll (1000 spots)	10	✓	
M9555; Bug screen inlet	1	✓	
Manual CD	1	✓	
AE33-FT-20 ; Sample filter tape - 20m roll (2000 spots)			
Serial cable			
UTP cable			
USB thumb drive			
Ambient weather station			T, p, RH, wind, solar irradiation
M4110; SCC Inlet, PM-2.5 @ 5 LPM Flow (SCC-1.829),			
M4121; MiniPM Inlet Kit - includes PM-10, PM-4, PM-2.5, PM-1, TSP			
M7900; TSI Flow Meter 4140: 0.05-20 LPM,			
M9610; Transit Case for Rack-Mount - Pelican 1630			
AE33-OPT CAL; Set of calibration ND optical filters			
AE33-FW CF; CF card with AE33 firmware			

PACKED BY: Vidmar

DATE: 5.2.14

Remarks:

+ 1x VAISALA CO2 SENS.
+ 1x KWF PUMP FOR SERVICE

SYSTEM CONFORMITY:

YES

NO

PERMISSION FOR DELIVERY BY:

Damjan Zore (Head of production)

SIGNATURE:

DATE:

05.02.14

Vidmar Primož (QA/QC)

SIGNATURE:

DATE:

5.2.14