

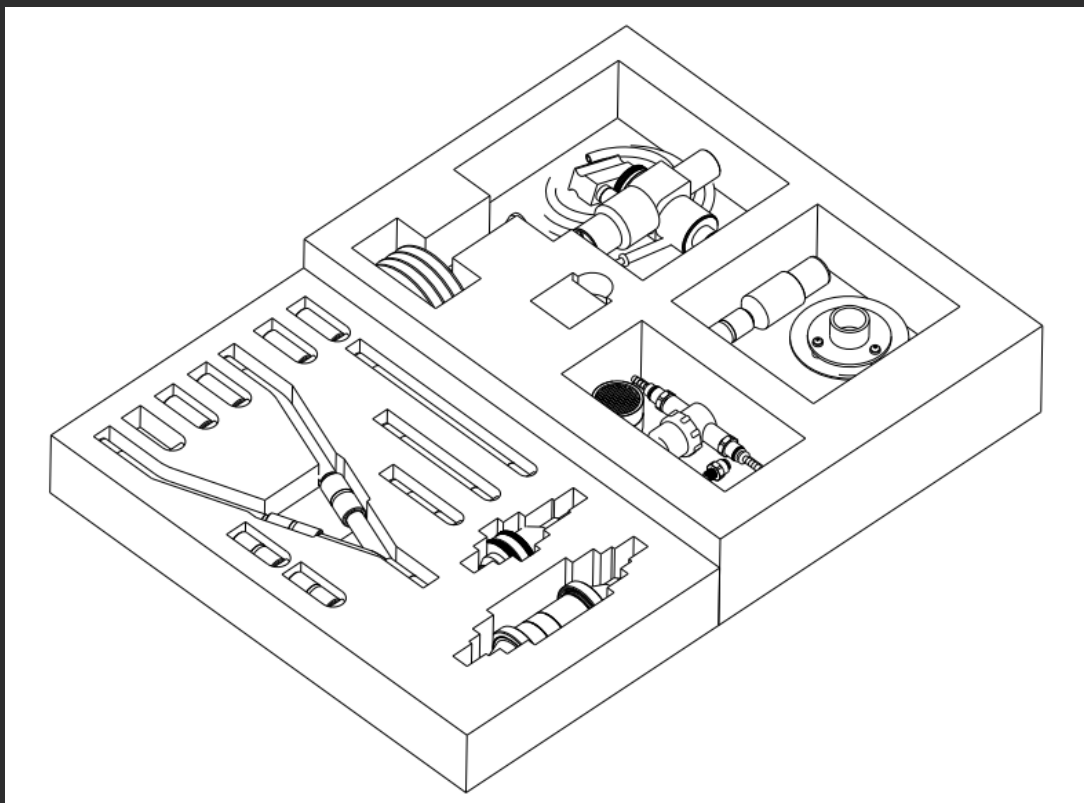
Total carbon analyzer TCA08

TCA08 Tests and procedures

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Product Manager

TCA08 PACKING LIST



Divider 40 deg

Divider tube

Coupling AC

Coupling B

Tube 14x2-90

Tube 14x2-152

Tube 14x2-242

VOC denuder, with shell (extra denuder added)

Sampler, 47mm

Sharp-cut Cyclone inlet, 2.5 μ m at 16.7 LPM flow

Quartz Filters, 47mm – pack of 25 pcs.

Insect and water trap assembly

Tweezers

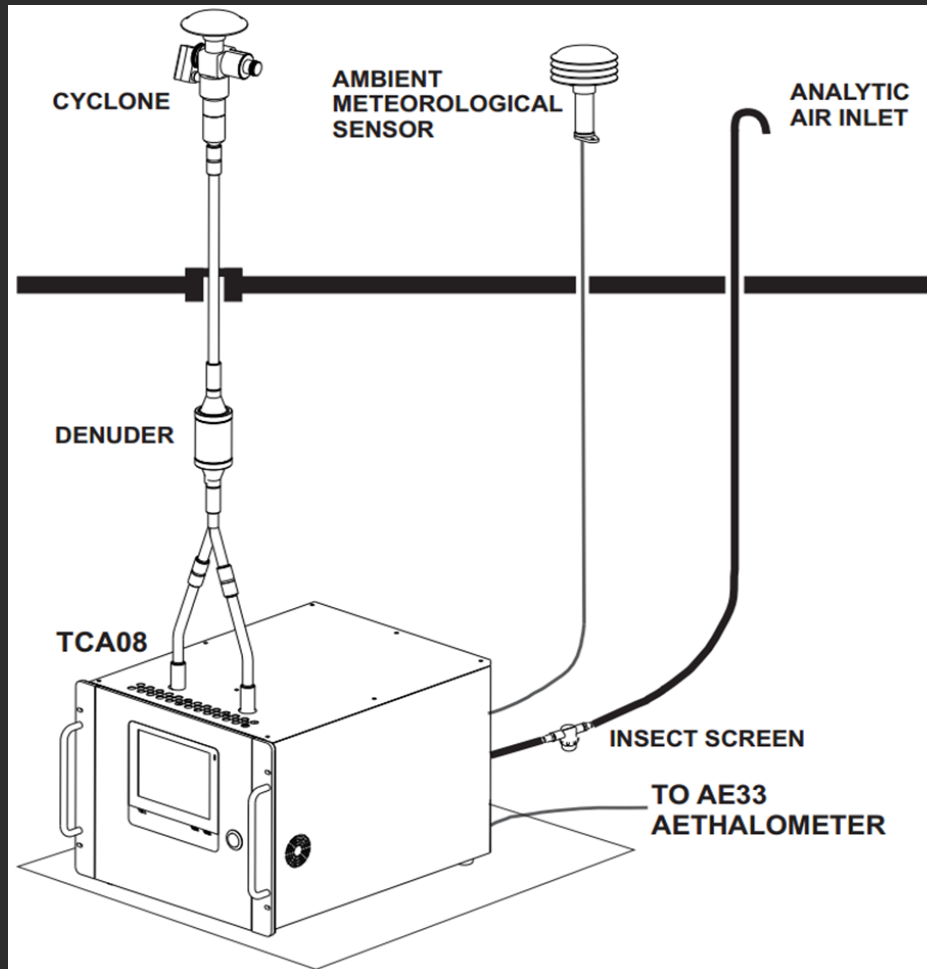
Null modem cable

Tetra cal adapter kit

Push to connect tool

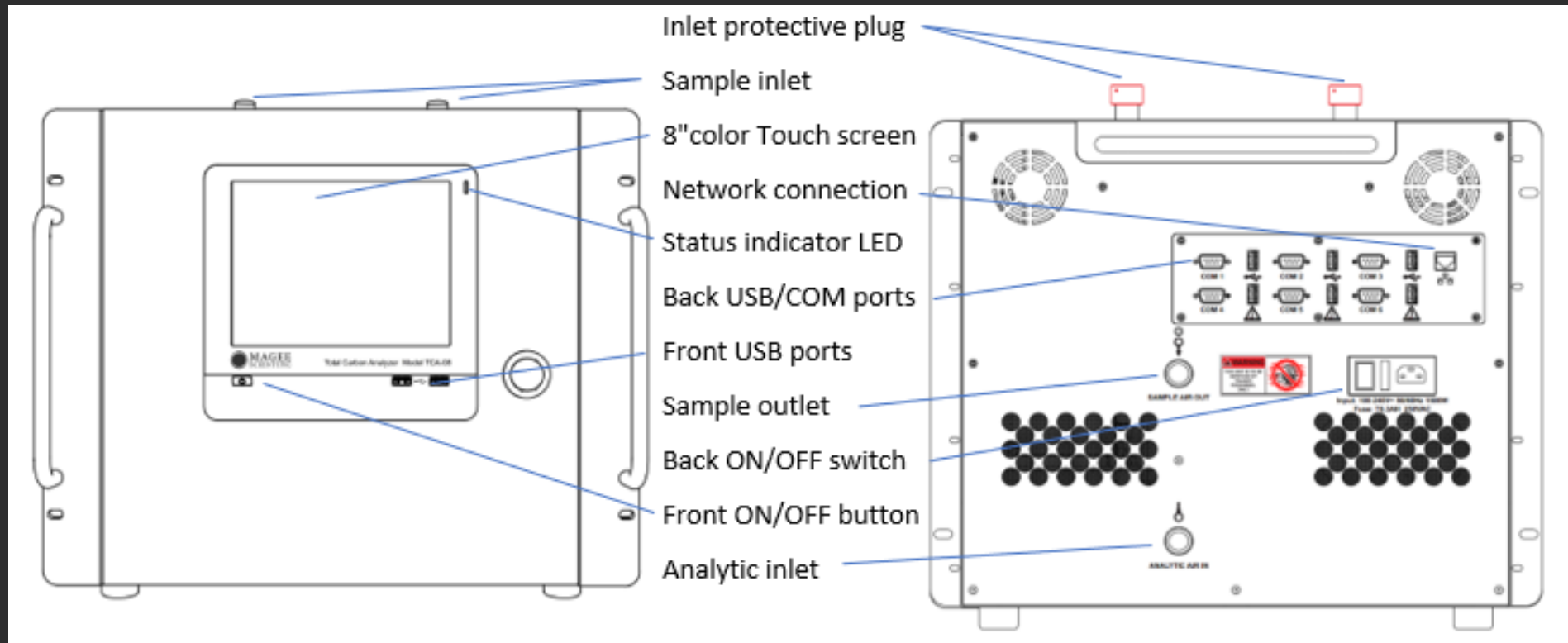
USB stick with manual

TCA08 INSTALLATION

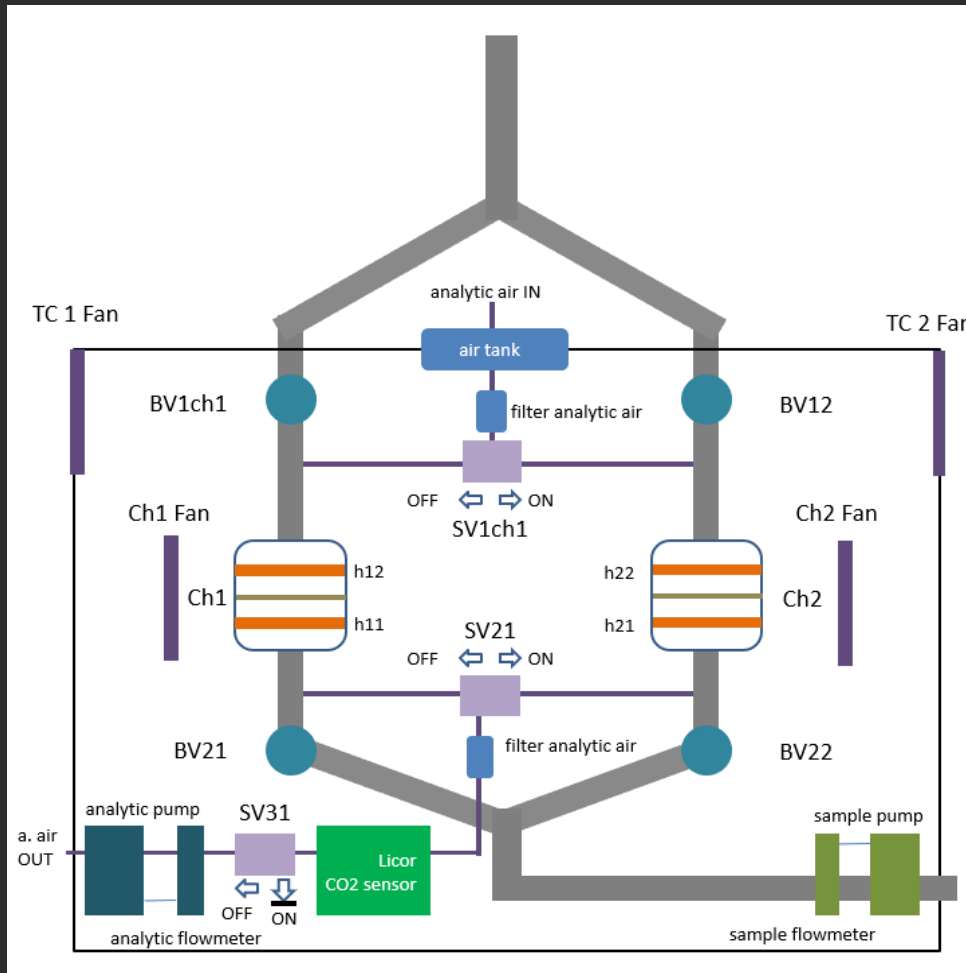


- Easy installation
- Custom sampling system
- For indoor installations only
- Operational altitude: up to 3000 m
- Operational temperature range: 10°C – 35°C
- Operational relative humidity range: 30% - 80%, non-condensing

TCA08 The instrument user panels



TCA08 GENERAL FLOW SCHEME



MECHANICALS

- 2 x analytic chambers for constant online measurements
- 4x ball valves for sample flow path
- 2x solenoid valves for analytic flow path
- 2x chamber cooling fans
- 2x mass flow meters
- 2x air pump
- 2x analytic air filters
- 1x extra solenoid for pressure test
- 1x CO2 sensot
- 2x cooling fans

TCA08 TESTS AND PROCEDURES

- [VIDEO OF THE TCA08](#)
- [INSTALLATION PROCEDURE](#)
- [USER INTERFACE](#)
- [FLOW CALIBRATION PROCEDURE](#)
- [OFFLINE ANALYSIS](#)
- [ANALYTIC AIR FILTER REPLACEMENT PROCEDURE](#)
- [CHAMBER REPLACEMENT PROCEDURE](#)
- [DENUDE CARTRIDGE REPLACEMENT PROCEDURE](#)
- [DENUDE EFFICIENCY TEST](#)

VIDEO RELATED TO TCA08



Aerosol Magee Scientific TCA08 - Installation procedure



Aerosol Magee Scientific TCA08 - Flow calibration procedure



Aerosol Magee Scientific TCA08 - Offline analysis



Aerosol Magee Scientific TCA08 - Analytic air filter replacement procedure



Aerosol Magee Scientific TCA08 - Quartz filter replacement procedure



Aerosol Magee Scientific TCA08 - User Interface



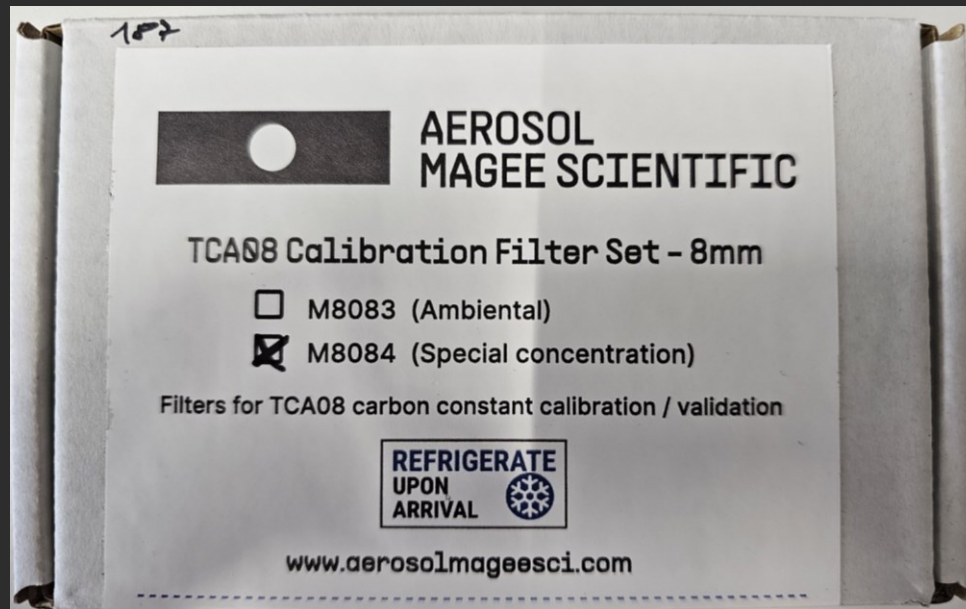
Aerosol Magee Scientific TCA08 - Chamber replacement procedure



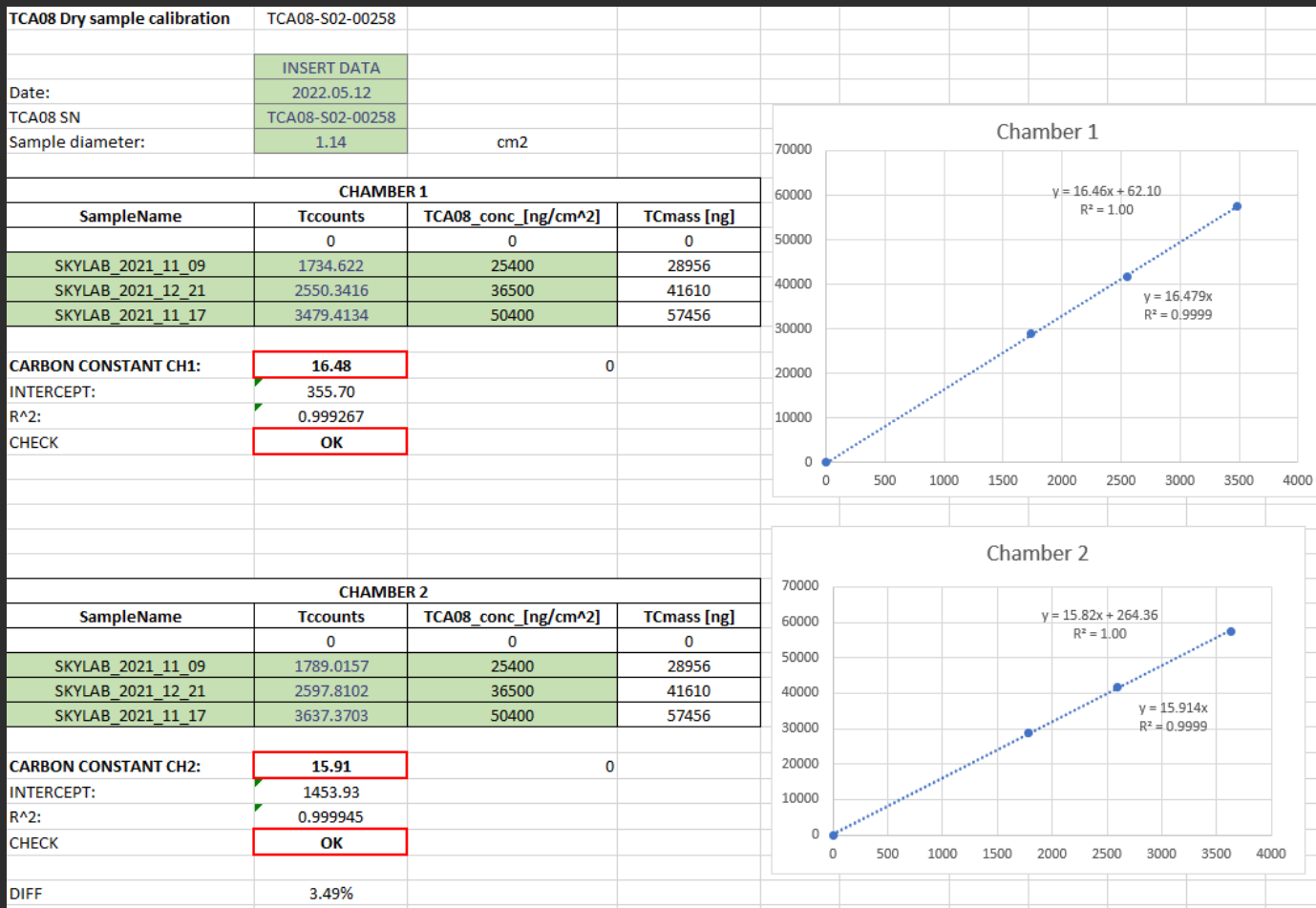
Aerosol Magee Scientific TCA08 - Denuder cartridge replacement procedure

<https://aerosolmageesci.com/group/mproducts/total-carbon-analyzer-model-tca08/>

TCA08 Tests and procedures / Carbon calibration – *Calibration set*

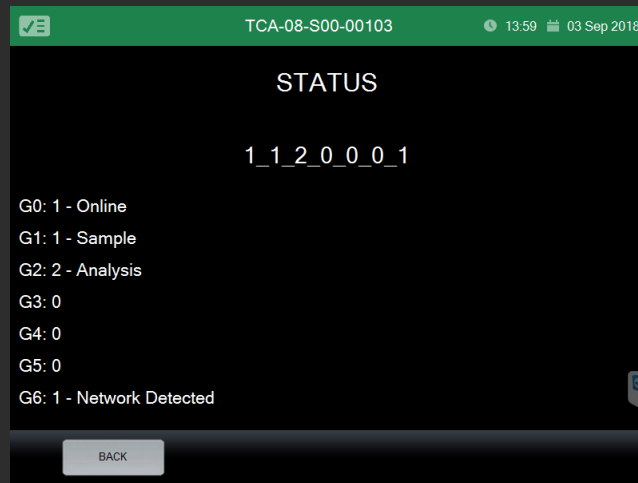


TCA08 Tests and procedures / Carbon calibration



TCA08 INSTRUMENT STATUS

bit	0	G0	G1	G2	G3	G4	G5	G6
0	1	Online meas.	Sample	Sample	Voltage Timeout e	Voltage Timeout e	Door Open w	Network detected
1	2	Offline meas.	Analysis	Analysis	Leakage w	Leakage w	Analytical flow w	Database e
2	4	Calibration	Clean	Clean	Filter Integrity Failed w	Filter Integrity Failed w	Sample flow w	Setup e
3	8	Verification	Leakage	Leakage	Heater Error e	Heater Error e		External device w
4	16	Change quartz	Denuder	Denuder	Overcurrent e	Overcurrent e		
5	32	Initializing standby			Voltage set error e	Voltage set error e		
6	64	Safety stop			Temperature sensor not connected e	Temperature sensor not connected e		
7	128	Critical stop			Ball Valve error e	Ball Valve error e		



G0: TCA operation

G1: Chamber 1 operation status

G2: Chamber 2 operation status

G3: Chamber 1 warning and errors status

G4: Chamber 2 warning and errors status

G5: Common warnings, errors and information

G6: Network & External device status

e – error, the instrument will stop (red status bar + reset is needed)

w – warning, the instrument keeps on running but needs tec



AEROSOL
MAGEE SCIENTIFIC

Thank you for your attention!

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