

TCR TECORA[®]

POLLUTION CHECK



INDUSTRIAL
EMISSIONS

Compliant with:

UNI EN 14385, CEN/TS 13649,
UNI EN 12919, UNI EN 13284,
UNI EN 1911, UNI EN 13211,
UNI N 14790, ISO 9096,
UNI EN16911.

Gas Conditioning System

DRYX

DRYX is a new TCR TECORA[®] concept device for gas sampling and conditioning. Differently from the other systems, **DRYX** is a real "sampling management platform", complete with all devices needed to perform any activity related to extract a gas from a duct, without altering the chemical and physical characteristics of it.

DIGITAL MANAGEMENT

The color touch screen display, fully field tested in all samplers produced by TCR TECORA[®] has been used also for **DRYX**. User friendly menu allows the operator to switch on the cooler in few seconds. The electronic microprocessor manages the start-up phase, waiting for stabilization of all parameters and, when it's ready, it starts to sample.

ONE "BOX" FOR ALL

DRYX has a membrane pump built in PTFE to suck the gas from the duct, reducing the stress of the analyzer pump. An adjustable bypass allows to regulate the optimal flow to the analyzer without over/under pressure that could damage it or alter the analyzer data. An optional flow measurement sensor permits to monitor the exact quantity of gas required from the analyzer.

Main Features

- Automatic control of all parameters;
- Special high performances solid state cooling system;
- Adjustable sample gas outlet dew point from +1 to +18°C;
- Trolley version available, IP 55 protection degree;
- Data download by USB port;
- Sampling session data output by txt file;
- Dynamic humidity control system;
- Optional oxygen sensor for leak check;
- Stand alone high stability temperature controllers;
- Fast start-up time < 10 minuts;
- External dust filter cartridge, porosity from 1 micron.



LINE AND PROBE TEMPERATURE CONTROL

Two built-in stand alone temperature controllers manage the heating of the sampling probe inserted in the duct and the PTFE/Stainless steel heated line. The controllers are connected to the microprocessor via RS 485 bus. This enable to set the set point directly from the user interface.

HUMIDITY CHECK

Before the gas output, an analog humidity sensor monitors the quantity of H₂O mixed in the sample. This is very important to preserve the analyzer from possible moisture that could accidentally enter in the internal circuit causing important and costly damages. An automatic routine checks the level of condensation and, in case of high level, activates a 3 way solenoid valve that opens a way to atmospheric vent. The sample is stopped and the analyzer is safe!





Features

AUTOMATIC CONDENSATION DRAIN OUT PERISTALTIC PUMP

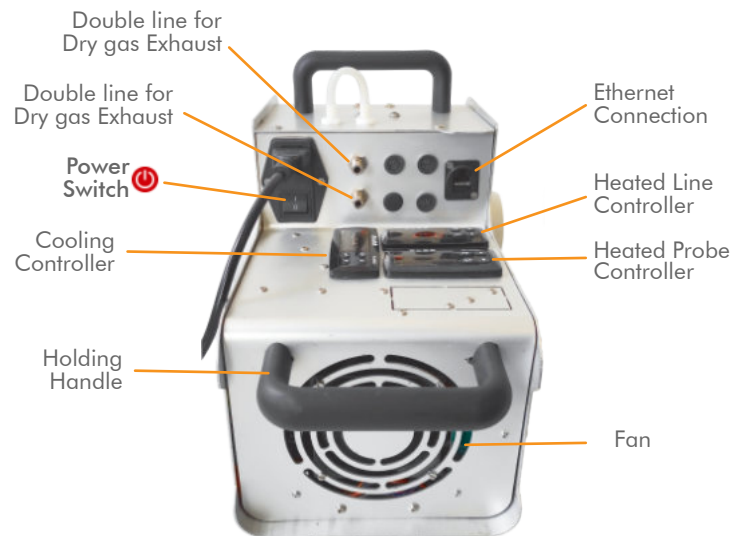
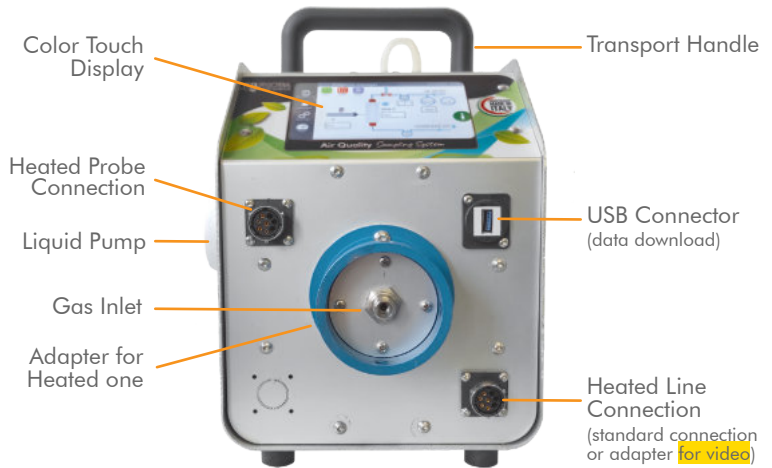
A high efficiency pump manages the moisture exhaust. A timer function adjusts the on-off time increasing the efficiency over a long sampling period.

OPTIONAL OXYGEN SENSOR

Unwanted leaks from the sampling probe to the conditioned gas outlet are monitored, and if there is a suspected entry of ambient air into the sampling system, an alarm alerts the test technician that sample dilution is in progress.

DATA MANAGENT

DRYX is not only a passive cooling device but a real "dynamic" system that is able to record all the variables during its operation. An USB port or an Ethernet connection are used to transfer a txt file where the user can find all the informations logged during the sampling. It is possible to verify the correct operation of the conditioning system, including the functionality of the heated sampling probe and the heated sampling line.

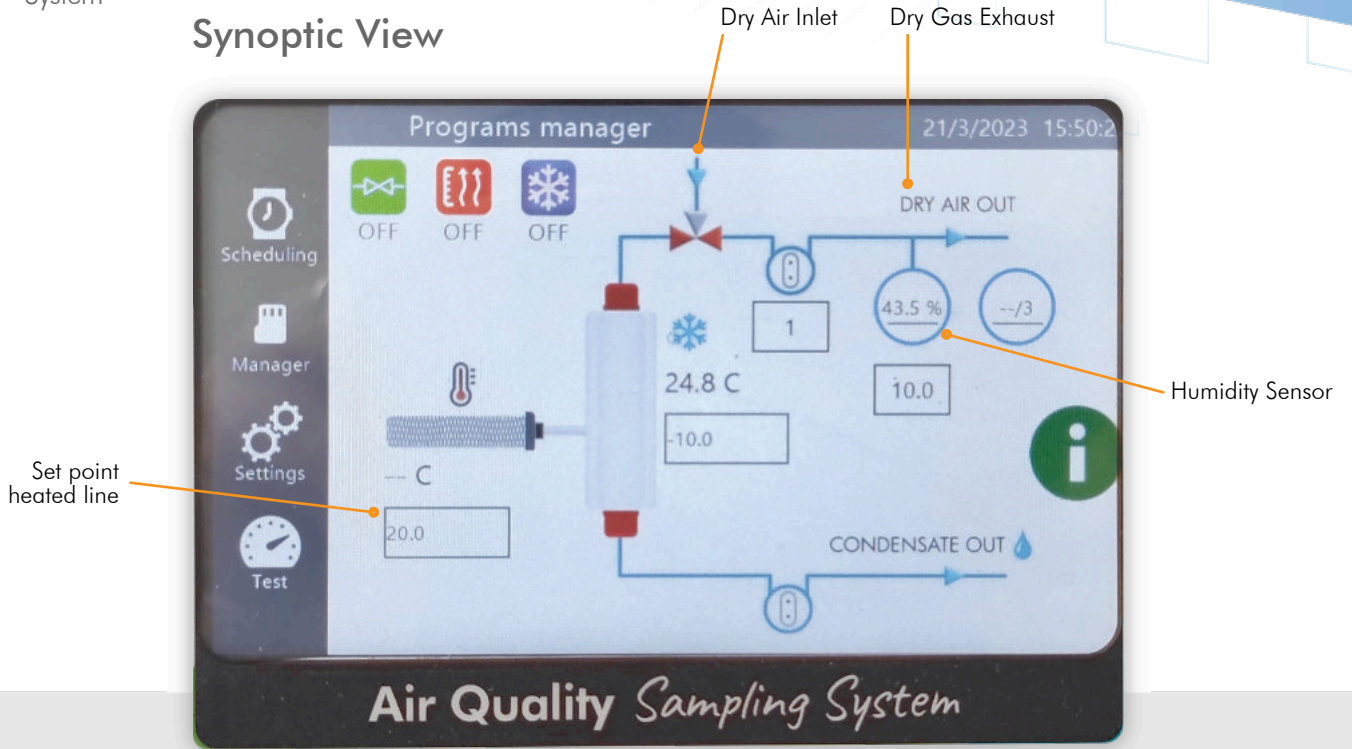




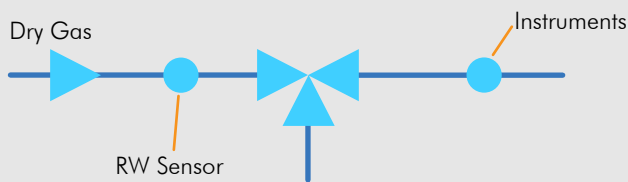
DRYX

Gas Conditioning System

Synoptic View



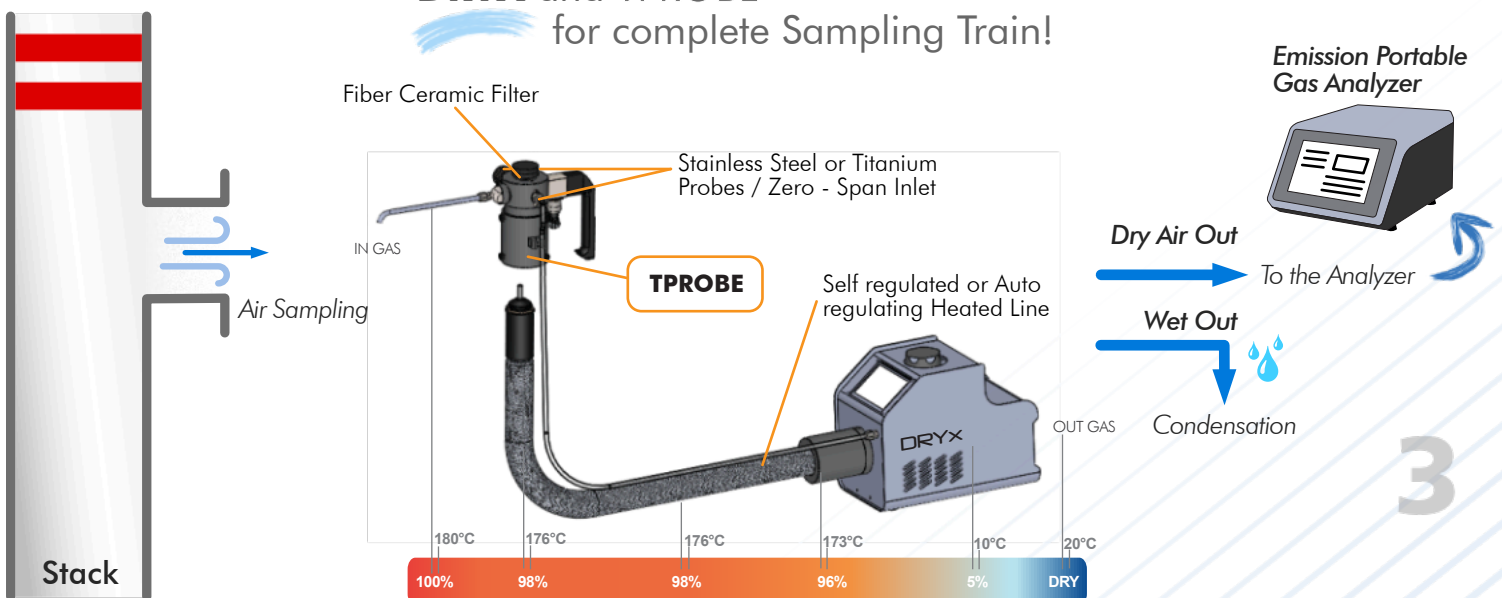
Protection Valve for the Analyzer



In case of humidity
3 way valve protects the
analyzer ambient
sending zero ambient air

DRYX and TPROBE

for complete Sampling Train!





DRYX

Gas Conditioning System

Specifications and Codes

Pump Flow Range	0-8 l/min (high range available on request)
Working Pressure	40 Kpa – 140 Kpa
External dust filter	Microfiber 2 μ m
Humidity sensor	0,1 ÷ 99,9 % res 0,1 %
Oxygen sensor (optional)	0 ÷ 25 % res 0,1 %
Inlet / Outlet connections	Swagelok Type connector (option PTFE)
Gas outlet dew point	2 ÷ 15 °C stability < \pm 0,1%
Gas inlet temperature	Max 200°C
Max. humidity gas inlet	99,99% AT 80 °C
Material in contact with the sample	Stainless Steel 316L, PTFE, Viton, Silicon
Startup time	< 10 minutes
Ambient working temperature	5 ÷ 45 °C
Storage temperature	-20 ÷ 60 °C
Power supply	230 VAC 50 / 60 Hz, 110 Vac 50 / 50 Hz +/- 10%
Power consumption conditioning unit	350 W
Power consumption heated probe	300 W
Power consumption heated line	80 W / mt
Dimensions	410 X 240 X 240 mm
Weight	7 KG
Code	AA99-000-0900SP

