

**Overview**

SGTA DM500 equipment is a complete air generation and treatment system purpose-designed for the pneumatic feeding of cables and/or wave guides where the consumption does not exceed 500 Litres/hour.

The container is a 19" standard rack that enables the maximum versatility of use.

The air supplied is guaranteed with a typical humidity level below 1.5% and a maximum < 5% for operation in any ambient condition; this also enables use of the equipment in areas where the temperature, especially at night, goes well below zero.

The equipment is powered by 220V AC 50Hz single-phase (on request 110 V AC 60Hz single-phase).

-- Air generation --

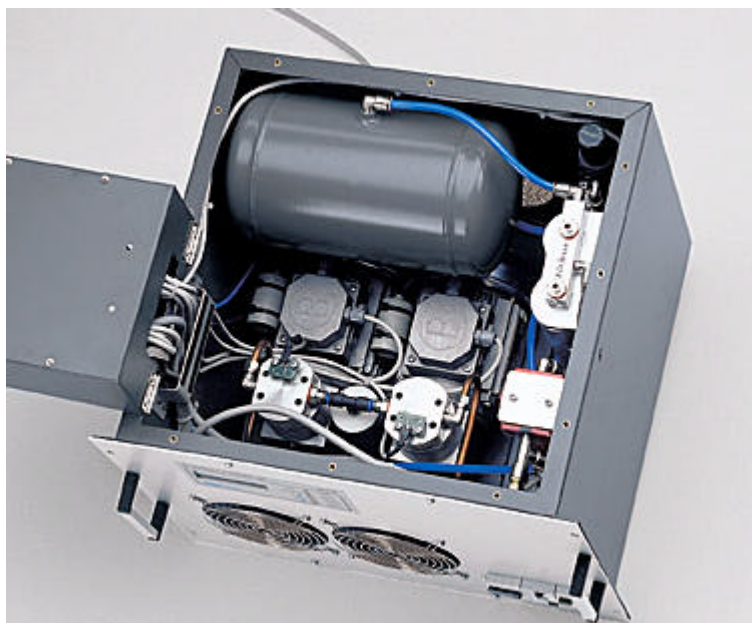
For the maximum reliability, air is generated with two identical mono-cylinder motor-driven compressors that work alternately to every tank filling-draining cycle.

-- Drying --

The air is dried by two towers filled with molecular sieves that work (drying air) or rest (tower regeneration) alternately. This drying system enables very low relative humidity values to be reached.

-- Outlet circuits --

The air released by the drying unit is stored in a 5 L stainless tank at a pressure between 4 to 6 bars. The air is taken to the outlet via a mechanical regulator that stabilises the pressure value.

**Electronic Control:**

The equipment is completely controlled by a microprocessor that manages all the functions autonomously. The board receives information about the process from the sensors for the tank pressure, outlet pressure, relative humidity and work temperature; the board uses this information to generate the commands for the two motors and the solenoid valves of the pneumatic circuit. A display on the front shows all the operational parameters and measurements and, with the aid of a functional keyboard, enables the alarm thresholds to be set.

Displayed measurements and parameters:

- Tank pressure and thresholds
 - Relative humidity and threshold
 - Compressor temperature
 - Draining times
 - Maintenance timer.
 - **Settable parameters:**
- Outlet pressure and thresholds
 - Ambient temperature
 - Filling times
 - Outlet flow and threshold
 - all the thresholds on the previous list.

Alarms:

All the alarms generated by the equipment are available in a connector on the rear panel; the most important are also displayed by the red LEDs on the front. The alarms are generated when either the thresholds set by the operator or by the factory are exceeded.

Data interface:

A serial data interface enables the equipment to be connected to any external control / supervision system.

Via the interface, it is possible to read and modify all the operational parameters and measurements.

Main features:

Size:	19" rack - 6 units high
Power-supply:	220V AC 50Hz or 110V AC 60Hz
Protection:	EMC protection and filter differential magnetothermal switch
Power:	below 500 W
Compressors :	twin-cylinder with laminar valves
Air generated:	? 1200 L /hour
Working air:	? 500 L /hour
Ambient conditions:	Humidity < 98% temperature from 0 to 40 ?C
Outlet humidity:	<< 5%
Outlet pressure:	0 to 2000 mBar
Data interface:	RS 485 9600 bit/s

