FIRST RAIN DISPLAY AND CONTROLLER



First rain display & regulator



- The display & regulator must be connected to a rain gauge
- Information about the rain status: no rain, first rain, further rain
- Configurable parameters to set thresholds of rain status (T1, T2, Qp)
- Relay outputs to indicate rain status

"First rain" is the first 5 mm of water rained in a given period od time. More than 5 mm of rain it is treated as "further rain" condition. DGP020 display unit, connected to a rain gauge, informs through its relay about the rain condition status, it shows the total rain, the rain intensity and the duration of the rain event. T1, T2 and Qp parameters shown below, are programmable. The status of rain indicated by the display are described below:

- No rain condition: is any period of at least T₁ min of no precipitation. The beginning of precipitation during the no rain period determines the transition to the status of "first rain"
- First rain condition: rainy condition, following a continuous period of no rain, or interrupted by any rain event intervals lower than T_2 min, until rain volume reaches Q_P mm. When reached Q_p mm of precipitation, the system moves to further rain condition. If during first rain condition rain stops for a period longer than T_2 min, the system goes back to the "no rain condition".
- Further rain condition: is the period following the first rain condition, during which there are no rain breaks longer than T_1 min. Break longer than T_1 minutes determines the transition to the "no rain condition".

 T_1 , T_2 and Q_P parameters are programmable.

Technical Specifications

Code	DGP020		
Input	Input	Tipping bucket rain gauge (1 imp. = 0.2 mm)	
Output	Relay	OFF during "further rain" condition ON during other conditions: No rain, First rain	
	Exchange contact	1 Amp 250 V AC	
Commands	Switch	On/Off	
	Led	Condition status information when relay is ON	
	Buttons	N.4 buttons for T ₁ , T ₂ , Q _p set-up and language	
Power supply	Power supply	24 V AC ± 10% (opz. 220 Vac)	
	Power consumption	2 VA	
	Battery	Rechargeable Ni-Mh 9 Vdc 150 mAh	
	Battery life	48 h if relay is OFF, 30 h if ON	
General information	CE	Industrial environments	
	Operative limits	050 °C; UR 090%	
	Language	Italian, English, French and German	
	Display	LCD 20 chars, N.4 rows	
	Dimension	144 x 72 mm	
	Enclosure	DIN box (ELF020)	





Accessories



ELF020

IP65 box for DGP020 First rain display and regulator.

It includes the power supply system (220 -> 24 V AC) and the main

switcher.

Dimensions: 300x400x200 mm

Material: polyester

Power supply: 220 -> 24 V AC Mounting: to mast or to wall

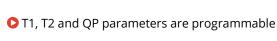
First Rain System

The First Rain System consists of a rain gauge connected to the regulator / first rain interventor closed inside an IP65 box. The system can be mounted on a pole and is connected to the electric pumps that regulate the opening / closing of the First Rain tanks.

The system includes:

Ref. Fig.	PN	Description
		Regulator/ First Rain Interventor
1	DGP020	Display+regulator/First Rain/24Vac
		IP65 Box
2	ELF020	Box IP65/DGP020
		Pole H.2 m (see catalogue MW9007-ENG-01)
3	DYA006.1	Pole/H=2m/D=50mm
	DYA020	Tripod/concrete installation/pole D= 50 mm
	DYA020.1	Anchoring bolts for tripod/3 set
		Rain Gauge (see catalogue MW9000-ENG-18)
4	DQA230.1	Sensor/Rain gauge/324cmq/Siphone/Hz
5	DYA040.2	Arm/DQA230-231/to D=50mm.pole
	DWA505A	Cable/L=5m/sensors

	Parameters	Range	Default
T1	Duration of the absence of precipitation that determines the transition from the condition of "further rain" to that of "absence rain"	19999 min	2880 min
T2	Duration of first rain breaks that do not suspend the latter condition The occurrence of a longer pause immediately leads back to the "no rain" condition	19999 min	2880 min
QP	Precipitation quantity, defined as first rain, the totalization of which determines the passage to the condition of "further rain"	19 mm	5 mm



LSI LASTEM Srl Via Ex SP. 161 Dosso, 9 20049 Settala (MI) Italy **Tel.** +39 02 954141 **Fax** +39 02 95770594 **Email** info@lsi-lastem.com **www.lsi-lastem.com**



