



Ethylene Sensor DE-19

Ethylene Sensor for ripening plants
Ultra Low Power Requirement
Work at BALANCE system with D100 Radiomodule

DJV-COM
Communication
and Sensor
Technologies

DE-19 measures ethylene content to control the atmosphere of **rapid ripening** of plant fruits. At the same time, **low ethylene content** must be controlled during food storage.

Recording Profiles and Monitoring Ethylene Content:

- In greenhouses when growing plants.
- In rapid ripening chambers.
- In warehouses, storages and refrigerators.
- In rooms intended for fruit processing.

An example of continuous monitoring.

The graph shows hourly profiles of ethylene concentration in ppm (10-6). For example, at 15 and 16 hours the concentration dropped to 12-13 ppm. The density of ethylene is 1.18 kg/m³, which is close to air density of 1.23 kg/m³.

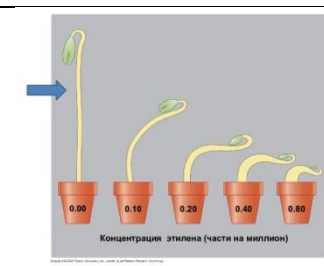
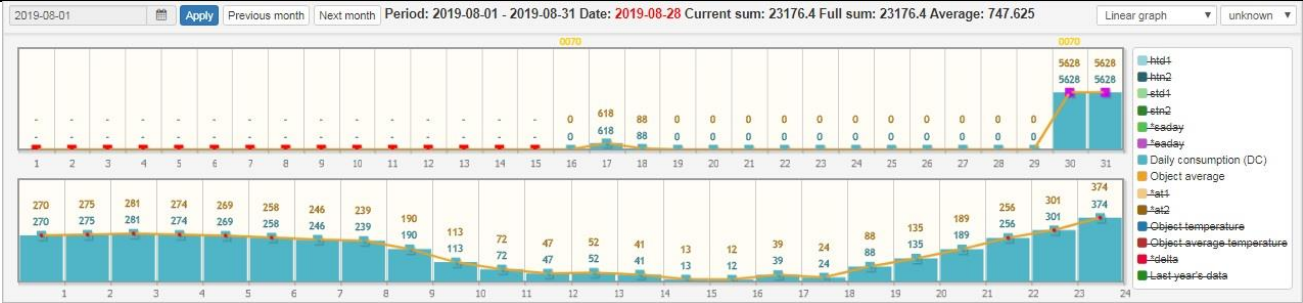
DE-19 măsoară conținutul de etilenă pentru a controla atmosfera de **maturizare rapidă** a plantelor. În același timp, atunci când depozitați alimente, este necesar să controlați conținutul **scăzut de etilenă**.

Înregistrarea profilului și controlul conținutului de etilenă:

- În sere când se cultivă plante.
- În camere de maturare rapidă.
- În depozite, depozite și frigider.
- În incintele destinate prelucrării fructelor.

Un exemplu de monitorizare continuă.

Grful prezintă profilurile orare ale concentrației de etilenă în ppm (10-6). De exemplu, la ora 15 și 16, concentrația a scăzut la 12-13 ppm. Densitatea etilenei este de 1,18 kg / m³, care este aproape de densitatea aerului de 1,23 kg / m³.



	Плоды	Листья	Цветы	Плоды	Овощи	Плоды
Общая	✓	✓	✓	✓	✓	✓
Авокадо	✓	✓	✓	✓	✓	✓
Орехи	✓	✓	✓	✓	✓	✓
Этилен	✓	✓	✓	✓	✓	✓
Абсолют	✓	✓	✓	✓	✓	✓

TECHNICAL CHARACTERISTICS

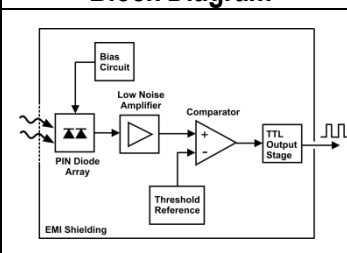
SPECIFICAȚII

Ultra low power 8 μA	6 years on battery power	Consum de energie 8 μA	6 ani cu baterie
Detector sensitivity:	30 ppm	Sensibilitate detector:	30 ppm
Measurement range	30 ppm – 1000 ppm	raza de masurare	30 ppm - 1000 ppm
Cross sensitivity	Carbon monoxide CO = 120%	Sensibilitate la alte gaze	Monoxid de carbon CO = 120%
TYPE REMOTE UNIT	Totalizer/ Microprocessor	TIP DE ACTIVITATE	Totalizator / Microprocesor
POWER SUPPLY	VDC 3,3 - 3,6 Volt,	ALIMENTARE ELECTRICALĂ	U = 3,3-3,6 volți DC,
MAX PULSE FREQUENCY	No more then 10 Hz	FRECVENȚA DE PULS	Nu mai mult de 10 Hz
CERTIFICATION (CE)	(EMC) and safety.	Certificare (CE)	(EMC) și siguranță.
AMBIENT CONDITIONS (temperature)	Storage: - 20°C ÷ 70°C Working: + 0°C ÷ 55°C	CONDIȚII DE MEDIU (temperatură)	Depozitare: - 20 ° C ÷ 70 ° C
PROTECTION CLASS	IP 30 (installed in the radio module)	Clasa de protecție	De lucru: + 0 ° C ÷ 55 ° C
MOUNTING (CABLE LENGTH = 0)	To the radio module D100	Instalare (lungimea cablului = 0)	IP 30 (instalat în modulul radio)
OUTPUT PULSE (LOAD)	Open drain + 2,7 kOhm	leșire / sarcină impuls	La modulul radio D100
Communication interface	Pulse Output		
MIN/MAX OUTPUT TENSION	0,9V / 3,3V	Interfață de comunicare	Drenaj deschis / 2,7 kΩ
MAX CURRENT	1,0 mA (DC)	Tensiune MIN / MAX	leșire impuls
PULSE DURATION	> 30ms	Curent maxim	0,9V / 3,3V

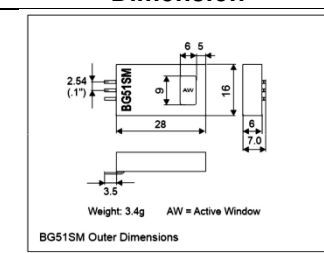
Photo DE-19



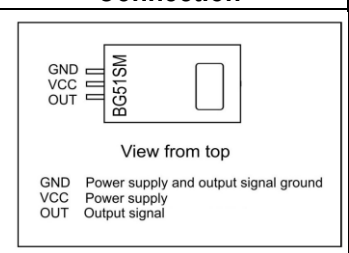
Block Diagram



Dimension



Connection



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