

GMON3 Snow Water Equivalency Sensor



The GammaMONitor (GMON3)* uses an innovative, non-contact method of measuring snow water equivalency (SWE). It monitors gamma rays that are naturally emitted from the ground. An attenuation of the gamma ray emissions occurs as snow accumulates. Snow with a higher water-content level causes a higher attenuation of the gamma ray emissions, making it possible to calculate SWE from the gamma ray measurements.

Mounting

The GMON3 is typically mounted to a user-supplied 10-ft long pipe via one 010748 Mounting Kit. The user-supplied pipe is supported by two masts, towers, or poles.



*The GMON3 monitors naturally occurring gamma radiation. No special licenses or precautions are required to install or operate the GMON3.

Features/Benefits

- Excellent alternative for traditional snow pillows
- Non-contact method of monitoring SWE
 - Performance not affected by adverse weather
 - Measurements that cover a large surface area (50-100 m²)
- Effective with any type of snow or ice

Ordering Information

Snow Water Equivalency Sensor

GMON-3-L
CSC Snow Equivalency
Sensor with user-specified
length.

Accessories

010748
GMON3 Mounting Kit

Specifications

Power Requirements:	11 to 15V DC
Power Consumption:	180 mA
Measurement Time:	24 hours
Output Format:	RS-232 (1200 to 115200 bps)
Measurement Range:	0 to 600 mm (0 to 2 ft) water equivalency
Accuracy¹	
0 to 300 mm:	±15 mm (±0.6 in.)
300 to 600 mm:	±15%
Resolution:	1 mm (0.004 in.)
Coverage Beam Angle:	60°
Dimensions without shield	
Length:	62 cm (24.4 in.)
Diameter:	12.7 cm (5 in.)
Weight	
Main Body:	9 kg (20 lb)
Collimator:	25 kg (55 lb)



The GMON3 components are shipped in a case with foam and handles for easy transport

¹Accuracy of the GMON3 sensor depends on adequate natural background radiation at the site.



The collimator ships separately in a heavy-duty case

The GMON3 is mounted approximately 3 m above the ground. If snow levels may exceed 3 m, then the GMON3 should be mounted higher than the maximum snow height