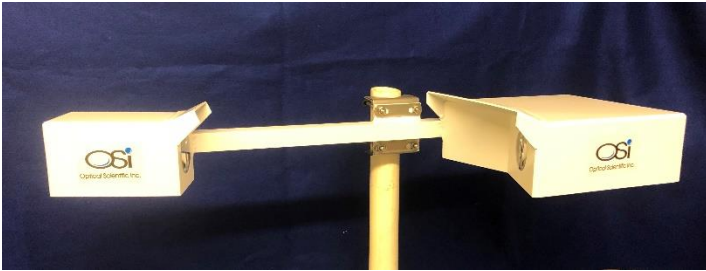


APG® All Precipitation Gauge APG-815



OSi's APG-815-DS (All Precipitation Gauge) uses proven optical scintillation technology and offers many performance and maintenance advantages over traditional tipping bucket and weighing type rain gauges. These advantages include:

- Measurement of instantaneous precipitation rate; rainfall as light as 0.1 mm/hr. easily measured; no evaporation errors; can handle extremely high rain rates > 500mm/hr.; no overflow or mechanical limits to worry about
- No moving parts; operates 24/7 under harsh field conditions. No antifreeze chemicals
- Dust / dirt on lenses does not affect measurement; ultra-low maintenance
- Wind does not create sampling problems. Slant path rain errors are negligible.
- RS- 232 digital output allows instant / detailed analysis of event
- Functions in all weather; our sensors are operating on every continent year-round (including Antarctica)
- Intelligent sensor; automatic correction and continuous internal monitoring; operates unattended
- Pays for itself in maintenance & replacement costs alone; no on-site monitoring needed; lasts for years
- Flexible mounting, even on moving platforms (buoys / shipboard); nominal 12VDC power

In addition to rain and snow water equivalent rate and accumulation the APG-815-DS report present weather codes in NWS and WMO formats. Traditional rain and precipitation gauges cannot report present weather codes.

APG® Advantages

- **Additional Capability:** Reports Present Weather Codes.
- **Superior Technology:** APG® uses Optical Scintillation which is superior to other methods; measures true rain rate
- **Long-term reliability:** operates unattended 24 hours/day, 7 days/week
- **Low maintenance**
- **Adaptive Heater Technology (AHT):** ideal for solar operation.
- **Data access:** Low cost cellular modem option
- **Self-diagnostics & Testing :** Continuously monitors performance and informs user of trouble

Adaptive Heater Technology (AHT) is used to conserved power. The lens heaters are only energized when needed. This mean the APG-815-DS is appropriate for solar powered installations. Solar power combined with OSi cellular phone makes the APG-815-DS ideal for remote installations and networks.

APG-815-DS Accessories:

- Cellular modem option, consult factory
- Solar Power Optional, consult factory
- PSB-815 AC Power Supply & Junction Box®
- QCS-815 QwikCollect Software: Collects, displays, archives data (compatible w/ all Windows systems)
- LDM Limited Distance Modem: for distances > 100 ft. (max = 7 miles).

APG-815-DS Ordering Information:

Part number: APG-815-DS



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OSi's sensors have more than 600 million hours of proven field operation in all climates. MTBF (Mean Time Between Failure) for OSi instruments is greater than 80,000 hours. The APG[®] operates unattended 24 hours a day, 7 days a week. The instrument uses proprietary algorithms that eliminate the need for frequent calibration. Field calibration every two years is typical. The APG[®] has AGC (Automatic Gain Control) to compensate for signal loss. The sensor also employs a comprehensive self-test that updates once per minute and reports any potential problems in the output message.

APG[®] Specifications

Performance Specification	
Rain Dynamic Range	0.1 to 500 mm/hr
Rain Accumulation	0.001 to 999.999 mm
Rain Accuracy	5% Accumulation
Rain Resolution	0.001 mm
Output Format	RS-232 Serial I/O, simple polled protocol
Snow Dynamic Range	0.1 to 500 mm/hr
Snow Accumulation	0.001 to 999.999 mm
Snow Accuracy	5% Accumulation
Snow Resolution	0.001 mm
NWS Present Weather Codes	Precipitation, Rain, Snow
WMO Table 4680 Present Weather Codes	Precipitation, Drizzle/Freezing Drizzle, Rain/Freezing Rain, Snow
Data Update Rate	Once per minute
Measurement Technique	Optical Scintillation
Output Format	RS-232 Serial I/O, simple polled protocol
Electronic Specification	
Supply voltage	12 VDC
Current	300 – 400 mA (Depends on Ambient Temperature)
Signal Output	RS-232 ASCII
Transient Protection	All power & signal cables protected
Environmental Specification	
Temperature	-40° to 50° C (-40° to 122° F)
Humidity	0-100%
Precipitation / Dust	NEMA 4 type protection
Physical Specification	
Head Size	730 x 102 x 254 mm (29 x 4 x 10 inches)
Head Weight	3 kg (6.6 lbs.)
Cable Length	15m (48 ft)

*Specifications are subject to change without notice



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For the most reliable and best performing precipitation instruments, please contact OSi today!