

PLUVIOMETER

Description:

There are currently two large groups of rain gauges on the market, the ordinary ones and the recorders, also known as rain gauges, although due to their characteristics, some of the latter are not available to certain users. In both types of rain gauges, a series of systematic errors usually occur that affect the quality of the measurements. Among these it is worth highlighting; those produced by the action of the wind, an inadequate location and installation, deficit readings, evaporation, wetting, etc. Thus, the present invention consists of a bucket-type recording rain gauge that is economically available to all types of users, with the particularity that it provides a quality measure of rainfall. To do this, the components of the rain gauge have been designed in such a way as to minimize errors produced by meteorological factors, essentially wind, as well as those produced by operational or instrumental factors.

Keywords:

[Pluviometer](#), [Rain](#), [Measurement](#)

Sectors:

[Engineering](#)

Areas:

[Hardware / Devices / Components](#), [Industrial](#)



Advantages:

Among the advantages of the present invention are: • The user has the possibility of combining the components of the device depending on the use that is going to give it, turning it into a recording or ordinary rain gauge, or even using it with both functions at the same time. • Reduces manufacturing costs by eliminating the need to manufacture two different models. • The speed and ease of assembly and disassembly of the upper rain collector, lower storage container and lower measuring cylinder, as all types of screws or auxiliary fixing mechanisms have been eliminated. • There is the possibility of having a collecting funnel with a wind protector, which greatly reduces the errors produced by the wind at the mouth of the rain gauge.

Uses and Applications:

The main function of the pluviometer proposed in the invention is the measurement of atmospheric precipitation in its liquid and solid forms, with the particularity of being able to be used as an ordinary rain gauge, a recording rain gauge or with both functions at the same time.

Patent Number: ES2411831B1

Applicants: Universidad De Málaga

Inventors: Antonio Jesús Sánchez Martos, Oscar David De Cozar Macias, M^a Del Carmen Ladrón De Guevara Muñoz, Elidia Beatriz Blazquez Parra, Isidro Ladron De Guevara Lopez

Filing Date: 30/12/2011

Protection Level: National (Spain)

Processing Status: Spanish patent