

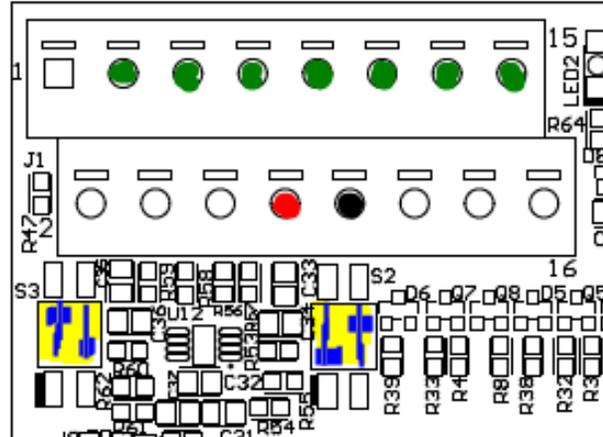
Integrated Weather Station Channel Gain

Scope

To document the channel gain for the two analog channels on the Rev 1 Integrated Weather Station.

Description

The Integrated Weather Station has two independent voltage channels for connection to Pyranometers, Wind Vanes or other analog voltage sources. Switch blocks, S2 and S3 on the top of the card closest J1 set the individual channel gain to 1, 10.09 or 101 depending on switch block settings. Each switch block has two switches which we designate (L)eft or (R)ight. If the switch is closest to J1 then it is Up, otherwise it is Down. The diagram on right shows S3-L Up, S3-R Down, S2-L Down, S2-R Up.



The Gain and typical application for the two channels is:

Input P7/P8 - POA

S3-L	S3 -R	Gain	Use -> Normally Apogee signal on RED pin, return on GREEN pin
Down	Down	101	Low level Pyranometers such as Kipp and Zonen, Hukseflux, LiCor
Down	Up	10.091	High level Pyranometers such as Apogee
Up	Down	1	Wind Direction Input
Up	Up	1	Wind Direction Input

Input P10/P11 - GHI or Wind Dir

S2-L	S2 -R	Gain	Use -> Normally Wind Direction GREEN wire signal on BLACK pin, return RED wire on GREEN pin
Down	Down	101	Low level Pyranometers such as Kipp and Zonen, Hukseflux, LiCor
Down	Up	10.091	High level Pyranometers such as Apogee
Up	Down	1	Wind Direction Input
Up	Up	1	Wind Direction Input

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