

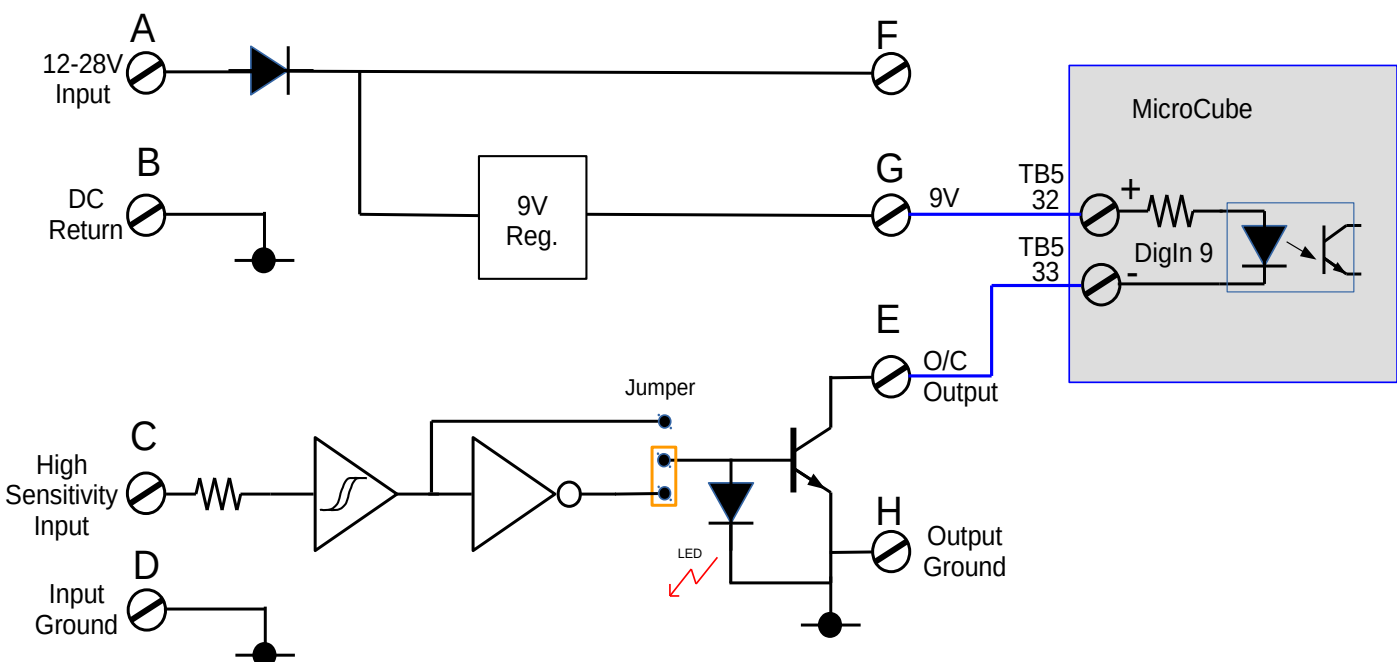
## P531 Sphere Switch Booster



### FEATURES

- ▶ **High input impedance**
- ▶ **Dual Chronometry Compatible**
- ▶ **Works with Micro<sup>3</sup>™ Prover Apps**
- ▶ **Works with Flow-Cal PROVEit RTU**

### BLOCK DIAGRAM



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## WIRING DIAGRAM FOR PULL-UP & PULL-DOWN PROVER SWITCHES



The input impedance of the P531 SSB is in excess of 100K Ohms and imposes a negligible loading on existing prover wiring, allowing additional provers to be connected to an existing system for validation. The high hysteresis amplifier ensures clean output signals even in noisy electrical environments

The output level can be inverted so that both Pull-Up and Pull-Down Prover switches can be utilized. A LED is provided to assist the user to determine which switch polarity is in use.

The P531 SSB can also be used as a CIU high-impedance interface device.

Pin	Name	Description
A	+12V to +28V DC In	DC Power Input Supply
B	DC Power Return	Common Ground
C	Hi-Z Detector/SS In	High Impedance I/P from Prover Switches/Detector
D	Input Ground	Common Ground
E	Open-Collector O/P	High Current O/C Boosted Output
F	Alternate Supply Out	Higher Voltage Feed for Low sensitivity Inputs
G	9V Supply	9V wetting voltage suits Microcube Prover Input
H	Output Ground	Common Ground

## P531 SPHERE SWITCH BOOSTER SPECIFICATION

<b>Supply Voltage</b>	12V to 28V DC input
<b>Dimensions</b>	2 1/2" (64mm) wide by 2 1/2" (64mm) tall
<b>Mounting</b>	Needs 23/32" (18.3mm) length of top-hat DIN Rail to EN50022
<b>Threshold Voltages</b>	Less than 2V, or more than 4V ( max 28V)
<b>Operating Polarity</b>	Normal or inverted, link selectable

## P531 SPHERE SWITCH BOOSTER FAQs

Q1 – Can the P531 Sphere Switch Booster be used with other proving computers.

Yes, with the 9V and supply-level pull-up and the rugged Open Collector Output, almost all prover computers can use this boosted Sphere Switch solution

Q2 – Does the P531 Sphere Switch Booster introduce any errors in the Dual Chronometry calculations performed in the low computer

No, the high speed amplifier will provide no discernable skew in the Switch signals

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