RB-Phi-204 500Kg S Type Load Cell



A load cell is a force sensing module - a carefully designed metal structure, with small elements called strain gauges mounted in precise locations on the structure. Load cells are designed to measure a specific type of force, and ignore other forces being applied. This S-Type load cell can be operated in compression or tension with up to 500 kilograms of force. The electrical signal output by the load cell is very small and requires specialized amplification. Fortunately, the 1046 PhidgetBridge will perform all the amplification and measurement of the electrical output.

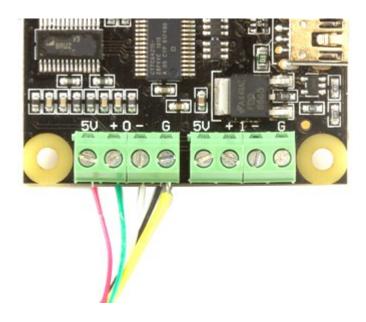
Connection

The 3140 connects to a bridge on the 4-Input



The following table shows how to connect the Load Cell Wires to the bridge connectors.

Wire Color	Red	Green	White	Black/Yellow
Bridge Connector	5V	+	-	GND



Features

Maximum Load Capacity: 500 kg Wheatstone Bridge Sensor Measures compressive or tensile force Plugs into the 4-Input

Specifications

Sensor Properties

Sensor Type	Compression/Tension Load Cell	
Weight Capacity Max	500 kg	
Maximum Overload	750 kg	

Electrical Properties

Output Impedance	350 Ω
Supply Voltage Min	9 V DC
Supply Voltage Max	12 V DC

Physical Properties

Compensated Temperature Min	-10 °C
Compensated Temperature Max	40 °C
Operating Temperature Min	-20 °C
Operating Temperature Max	55 °C
Cable Length	3 m
Cable Gauge	5x 22 AWG
Material	Alloy Steel
IP Rating	IP66
Weight	603 g