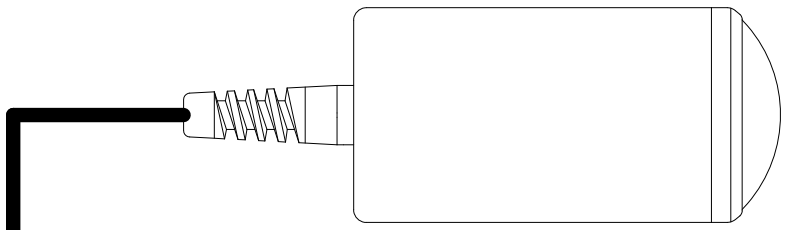
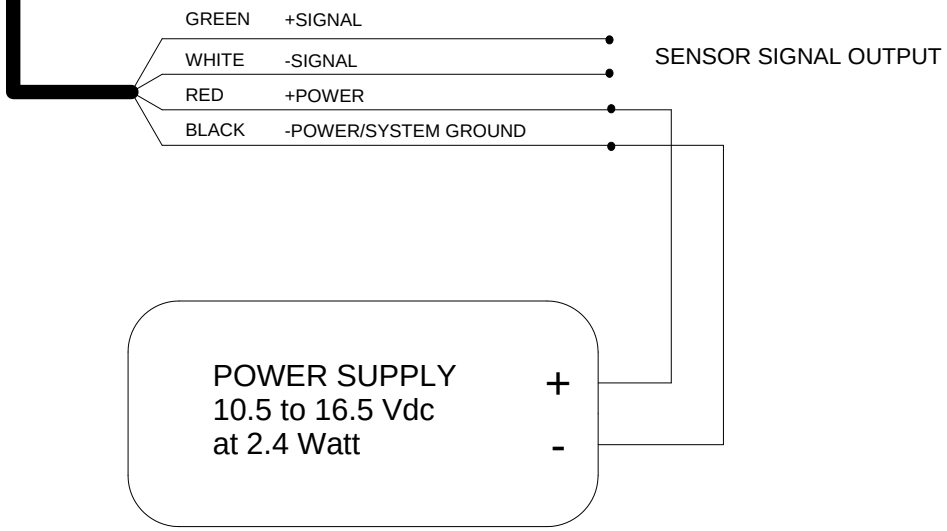
DRS1000





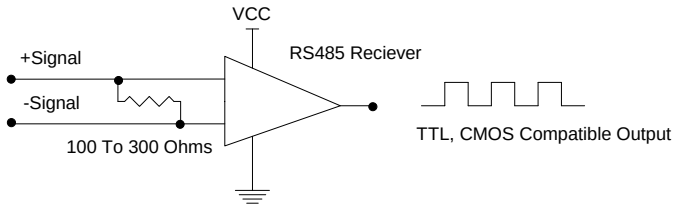
The signal output from the DRS1000 speed sensor is a 0 to 5 volt differential line driver that is compatible with RS485 specifications. The sensor output may be interfaced to the monitoring electronics in a number of ways:

OPTION 1. Fully Differential - To maintain the integrity of the output signal over long distances (greater than 10 or 20 meters) or in electrically noisy environments, it is recommended that the +SIGNAL and -SIGNAL outputs be connected in differential mode over twisted pair wiring to an RS485 compatible receiver with an optional line termination resistor of 100 to 300 ohms.

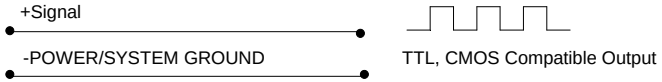
OPTIONS 2 and 3. Single Ended - For short transmission distances in relatively quiet electrical environments, the sensor output signal can be obtained by referencing either of the SIGNAL outputs to the POWER / SYSTEM GROUND node. The difference between Option 2 and Option 3 is a 180 degree phase shift between the two outputs. It is possible to monitor both of the SIGNAL outputs in this manner at the same time.

Under no circumstances should either of the SIGNAL outputs be grounded.

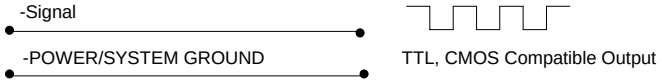
SENSOR SIGNAL OUTPUT WIRING - OPTION 1



SENSOR SIGNAL OUTPUT WIRING - OPTION 2



SENSOR SIGNAL OUTPUT WIRING - OPTION 3



REV 1.1

DRS1000 WIRING DIAGRAM

GMH Engineering