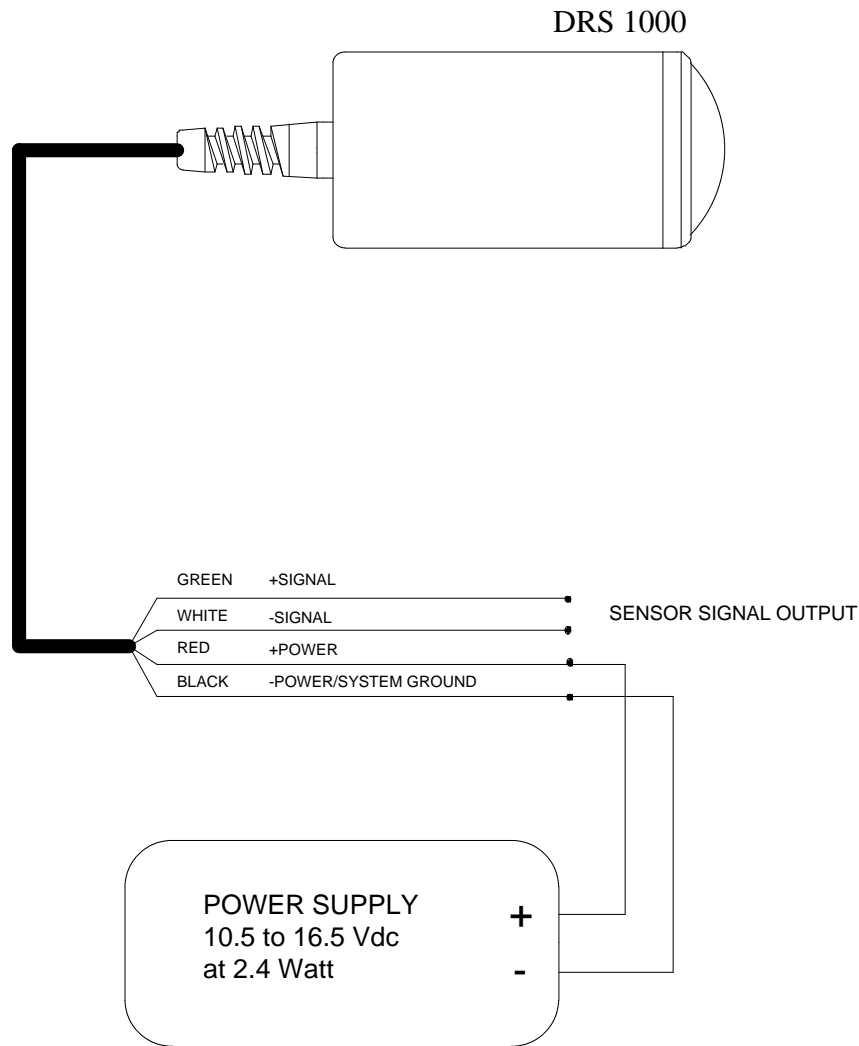


DRS 1000 SIGNAL/POWER INTERFACE



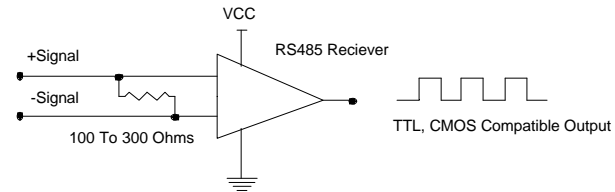
The signal output from the DRS1000 speed sensor is a 0 to 5 volt differential line driver that meets RS485 specifications. This type of output driver may be interfaced to the monitoring electronics in a number of ways. Three interfacing options are shown.

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 twisted pair wiring and an RS485 receiver with a line termination resistor be used. The termination resistor value will generally fall within a range of 100 to 300 ohms. This option is capable of maintaining the integrity of the sensor signal over many hundreds of meters of economical twisted pair cabling.

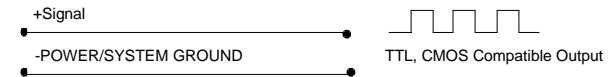
OPTIONS 2 and 3. Single Ended - For short transmission distances in relatively quiet electrical environments, the sensor output signal can be obtained by referencing either of the two differential outputs to the -POWER/SYSTEM GROUND node. The difference between Option 2 and Option 3 is a 180 degree phase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

Under no circumstances should either of the differential outputs be grounded

SENSOR SIGNAL OUTPUT WIRING - OPTION 1



SENSOR SIGNAL OUTPUT WIRING - OPTION 2



SENSOR SIGNAL OUTPUT WIRING - OPTION 3

