



**MODEL 05631C**  
**WIND LINE DRIVER**

**INSTRUCTION SHEET 05631C-90**  
**REV: B051311**

**SPECIFICATIONS**

Wind Speed Input: YOUNG Wind Monitor series of sensors  
AC sine wave, Frequency proportional  
to wind speed. 3 pulses per revolution.  
Input sensitivity nom. 40 mV p-p

Wind Direction Input: Analog voltage from azimuth  
potentiometer. Regulated excitation  
voltage is supplied from interface circuit  
to potentiometer.

Wind Speed Output: 4 to 20 mA = 0-100 M/S  
Wind Direction Output: 4 to 20 mA = 0 to 360°

Overall accuracy: ± 1% of full scale over temperature and  
supply voltage range

Dimensions: 110 mm W x 75 mm H x 56 mm D  
(4.3 in W x 2.9 in H x 2.2 in D)

Mounting: U-bolt for vertical pipe  
25-50mm (1-2 in) Diameter

Power Requirement: 12-30 VDC

Temperature Range: -50 to 50°C (-58 to 122°F)

**INTRODUCTION**

The Wind Line Driver converts raw signals from the wind sensors to proportional 4 to 20 mA current loop values. The Line Driver acts like a variable resistance that draws 4 - 20 mA when powered with 12 to 30 VDC. Although it has only one PC board, the Line Driver contains two completely independent circuits - one for wind speed and the other for wind direction. See wiring diagram below.

**IMPORTANT!**

**The Wind Line Driver provides a calibrated current signal for wind speed and wind direction. Externally connected devices should be reviewed for compatibility and correct signal scaling.**

Repairs should be attempted only by qualified service personnel.

**CALIBRATION FORMULAS**

WIND SPEED	vs	mA OUTPUT
m/s	=	( 6.250 x mA)-25
knots	=	(12.149 x mA)-48.6
mph	=	(13.980 x mA)-56
km/h	=	(22.500 x mA)-90
WIND DIRECTION	vs	mA OUTPUT
DEGREES	=	(22.5 x mA)-90

**WARRANTY**

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of initial purchase. Liability is limited to repair or replacement of defective item. A copy of the warranty policy may be obtained from R. M. Young Company.

**CE COMPLIANCE**

This product has been tested and shown to comply with European CE requirements for the EMC Directive. Please note that shielded cable must be used.

**Declaration of Conformity**

R. M. Young Company  
2801 Aero Park Drive  
Traverse City, MI 49686 USA

Model 05631C Wind Line Driver

The undersigned hereby declares on behalf of R. M. Young Company that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

Council Directive 2004/108/EC (December 15, 2004)  
on Electromagnetic Compatibility

David Poinsett  
R&D Manager

