



## Weather Station

The Weather Station provides relative humidity and barometric pressure measurements to the Taylor Dynamometer DynPro data acquisition and control system. It includes the inputs necessary for correcting data to standard atmospheric conditions. By utilizing the powerful calculating capabilities of the DynPro data acquisition and control system and the Weather Station option you will be able to apply atmospheric correction to data automatically. Engine Instrumentation Unit required.

## Relative Humidity Sensor

- Measuring range: 0 to 98 %
- Accuracy:  $\pm 2$  %
- Output signal: 0V to 5V
- Supply voltage: 8VDC to 33VDC
- Interchangeable sensor module S6000
- Linearized and temperature compensated humidity measurement
- Capacitive thin film humidity sensor
- Sensor response time: < 10 seconds

## Barometric Pressure Transducer

- Measuring range: 23.62 inHG to 32.48inHG (800mb to 1100mb)
- Accuracy RSS:  $\pm 0.25\%$  FS (at constant temp)
- Compensated Range  $^{\circ}\text{F} (^{\circ}\text{C})$ : +30 to +130 (0 to +55)
- Zero Shift (Over Compensated Range) 1% FS
- Span Shift (Over Compensated Range) 1% FS
- Resolution Infinite, limited only by output noise level (0.0005% FS)
- Time Constant 10 milliseconds to reach 90% final output with step function pressure input.
- Stainless Steel Case

SMS845v005