The TIP150 is an IndustryPack® compatible module providing one or two channels of a tracking synchro / resolver-to-digital converter. The resolution programming allows selection of 10, 12, 14 or 16 bit conversion. This combines the high tracking rate of a 10 bit converter with the precision of a 16 bit converter.

Two converter accuracies are available: TIP150-x0R with 4 arcmin +1LSB and TIP150-x1R with 2 arcmin +1LSB. The customer specific signal conditioning adapter (TIP150-Ay-xx) per channel provides an easy interface to the different types of synchro and resolvers. For highest accuracy the on board reference oscillator of the signal conditioning adapter TIP150-A2-xx and TIP150-A4-xx automatically compensates the phase error generated by the synchro / resolver.

Software support (TIP150-SW-xx) is available for different operating systems.

### Application Information

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- One or two channels Tracking Synchro/Resolver-To-Digital-Converter
- Programmable resolution 10, 12, 14 or 16 bits
- Adjustable bandwidth
- Converter accuracy 4 or 2 arcmin +1LSB
- Velocity output and built-in-test output
- Individual input voltage for each channel by signal conditioning adapter
- Optional reference oscillator for each channel on signal conditioning adapter
- Oscillator frequency factory selectable 2 - 20KHz
- Oscillator amplitude 11.8Vrms maximum
- Resolver phase error compensation
Order Information

RoHS Compliant
TIP150-30R  1 x Synchro / Resolver Interface, 4 arcmin, TIP150-Ay-xx required
TIP150-31R  1 x Synchro / Resolver Interface, 2 arcmin, TIP150-Ay-xx required
TIP150-40R  2 x Synchro / Resolver Interface, 4 arcmin, TIP150-Ay-xx per channel required
TIP150-41R  2 x Synchro / Resolver Interface, 2 arcmin, TIP150-Ay-xx per channel required
TIP150-A1-xxR Resolver Signal Conditioning Adapter
TIP150-A2-xxR Resolver Signal Conditioning Adapter with Reference Oscillator

For the availability of non-RoHS compliant (leaded solder) products please contact TEWS.

Non-RoHS compliant
TIP150-A3-xx  High Precision Synchro / Resolver Signal Conditioning Adapter
TIP150-A4-xx  High Precision Synchro / Resolver Signal Conditioning Adapter with Reference Oscillator

Documentation
TIP150-DOC  User Manual

Software
TIP150-SW-42  VxWorks Software Support (Legacy and VxBus-Enabled Software Support)
TIP150-SW-65  Windows Software Support
TIP150-SW-82  Linux Software Support
TIP150-SW-95  QNX Software Support

For other operating systems please contact TEWS.