

# TIP150 1 or 2 Channel Synchro / Resolver-To-Digital-Converter

### **Application Information**

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.



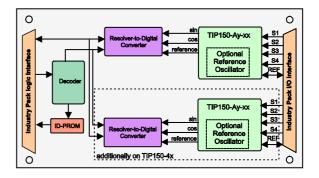
Two converter accuracies are available: TIP150-x0x with 4 arcmin +1LSB and TIP150-x1x with 2 arcmin +1LSB. The customer specific signal conditioning adapter (TIP150-Ayxx) per channel provides an easy interface to the different types of synchro and resolvers. For highest accuracy the on board reference oscillator of the signal conditioning adapter TIP150-A2-xx and TIP150-A4-xx automatically compensates the phase error generated by the synchro / resolver.

For First-Time-Buyers the Engineering Documentation TIP150-ED recommended. The Engineering Documentation includes TIP150-DOC, schematics and data sheets.

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

#### **Technical Information**

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack 0
- 0 One or two channels Tracking Synchro/Resolver-To-Digital-Converter
- Programmable resolution 10, 12, 14 or 16 bits
- 0 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



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# The Embedded I/O Company

#### **Order Information**

# **RoHS Compliant**

TIP150-30R One channel Tracking RDC, converter

accuracy 4 arcmin + 1LSB

TIP150-31R One channel Tracking RDC, converter

accuracy 2 arcmin + 1LSB

Two channel Tracking RDC, converter **TIP150-40R** 

accuracy 4 arcmin + 1LSB

TIP150-41R Two channel Tracking RDC, converter

accuracy 2 arcmin + 1LSB

TIP150-A1-xxR Resolver Signal Conditioning Adapter TIP150-A2-xxR

Resolver Signal Conditioning Adapter with

reference oscillator

#### **None RoHS Compliant**

TIP150-30 None RoHS compliant version of

TIP150-30R

TIP150-31 None RoHS compliant version of

TIP150-31R

TIP150-40 None RoHS compliant version of

TIP150-40R

TIP150-41 None RoHS compliant version of

TIP150-41R

TIP150-A1-xx None RoHS compliant version of

TIP150-A1-xxR

TIP150-A2-xx None RoHS compliant version of

TIP150-A2-xxR

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** 

TIP150-ED Engineering Documentation, includes

TIP150-DOC

**Software** 

TIP150-SW-25 Integrity Software Support TIP150-SW-42 VxWorks Software Support

(Legacy and VxBus-Enabled Software

Support)

TIP150-SW-65 Windows XP/XPE/2000 Software Support

LynxOS Software Support TIP150-SW-72 TIP150-SW-82 LiNUX Software Support TIP150-SW-95 QNX 6 Software Support

For other operating systems please contact TEWS.

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