

# Navtech Systems

## ARINC429 to NMEA 0183 translator (RS232/RS422)



Navtech's ARINC-NMEA Translator outputs industry standard NMEA 0183 messages in real-time, from encoded data on an ARINC 429 data-bus. This enables interfacing of proprietary ancillary systems to the aircraft data bus for navigation or other peripheral operations. The NMEA 0183 messages are transmitted as RS232 or RS422 serial data in standard ASCII format. The Translator is adaptable for high or low speed ARINC 429 Data. Isolated inputs ensure minimal ground loop interference and ARINC data-bus protection.

- Diagnostic LED's indicate status of the ARINC/NMEA decoding
- User configurable by direct connection to the serial port of a PC
- Ideal diagnostic tool for ARINC data bus investigations.

Powered from an external supply (10 to 36 Volts; 28 volts nominal aircraft supply). The Translator is current and reverse polarity protected.

### Typical ARINC429 Labels Converted

ARINC429 Label	Description of Label	Format
125	UTC (GMT)	BCD
260	Date	BCD
310	Latitude	BNR
311	Longitude	BNR
314	True Heading	BNR
320	Magnetic heading	BNR
147	Magnetic Variation	BNR
312	Ground Speed	BNR
203	Altitude	BNR

## Typical user specified NMEA output sentences

\$GPGGA - \$GPRMC - \$GPVTG - \$GPZDA - \$HCHDG - \$HCHDM -

## Interface Connectors:

Power & Data - ARINC i/p, NMEA o/p

9 way D plug

Function	PIN #
+ 28V dc supply	1
Supply return	2
ARINC i/p - a	3
ARINC i/p - b	4
PC serial i/p (RS232)	5
RS422 o/p +ve	6
RS422 o/p - ve	7
Common 0V	8
RS232 o/p	9

## Power:

10 – 36 Volts dc (from aircraft 28V supply) ~ 50mA max

## Data:

- RS 232 NMEA output ASCII @ 4800 baud
- RS 422 NMEA output ASCII @ 4800 baud

The output data is in either RS232 or RS422 serial format.

The output messages conform to NMEA 0183 standard ASCII format.

## Dimensions (approx)

Length 140 mm  
Width 62 mm  
Height 32 mm

## Weight

120gm (approx)



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