

ADA-44DR



ADA-44DR Dead-Reckoning Receiver

Feature:

- 100% indoor/outdoor vehicle positioning
- 3-axis accelerometer and gyroscope sensor included
- Metallic base to enhance the grounding

Application:

- GNSS navigation for 3D positioning
- AVL applications
- Inertial navigation

Specifications:

Category	Specifications		
PERFORMANCE			
Built-in Antenna	Highly-reliable ceramic patch		
Sensitivity		GPS & GLONASS	GPS
	Tracking & Navigation	-160 dBm	-160 dBm
	Cold starts	-147 dBm	-147dBm
	Hot starts	-156 dBm	-156 dBm
SBAS	WAAS, EGNOS, MSAS		
Receiver architecture	72 parallel channels GPS L1C/A, SBAS L1C/A, QZSS L1C/A GLONASS L1OF, Galileo E1B/C		
Start-up time *		GPS & GLONASS	GPS
	hot start	1.5 s	1.5 s
	cold start	27 s	30 s
	Aided start	4 s	3 s
Position accuracy*	Without aid: 2.5 CEP		SBAS: 2.0 m
Velocity	500 m/s		
Velocity accurac	0.05 m/s		
Altitude	50,000m (Maximum)		
Update Rate	1 Hz		
Power Supply	8~35V		
Power Consumption	55 mA @ 12V		
Baud Rate	115200 bps		
INTERFACE CAPABILITY			
Standard Output Sentences	GSV,GGA,RMC		
COMMUNICATION			
Protocol	NMEA 0183 V4.0, UBX Binary		
Interface	RS-232		
ENVIRONMENTAL CONDITIONS			
Temperature	Operating: -20 ~ +60 °C		
	Storage: -20 ~ +60 °C		
PHYSICAL CONSTRUCTION			
Dimension	56mm (Diameter) x 21.8 mm (Height)		

Weight	<87 gram
Receiving frequency	1575.42MHZ & 1602MHZ ; C/A code
Enclosure	Highly impact; corrosion-proof
Mounting	Roof mount
Construction	Full EMI shielding
POWER CABLE	
Length	7m

*GNSS fix available, CEP, 50%, 24 hours static, -130 dBm, > 6 SVs

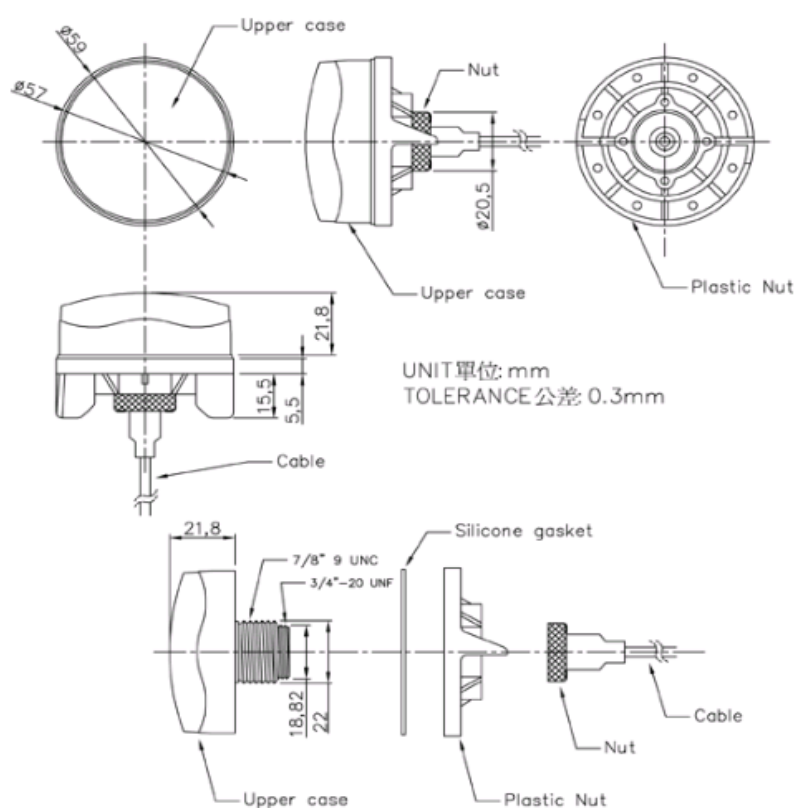
Speed pulse inputs wheel (speed) tick resolution : ≤ 40 cm/tick

Wheel tick specification : Accepts 3.3V or 12V logic.

Transition threshold will be 0.8V to 2.0V

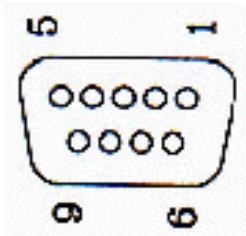
*** This specification is subject to change without prior notice**

Mechanical Drawing (mm):



Pin Assignment:

DB-9 Female



Pin1=n/c
Pin2=RXD
Pin3=TXD
Pin4=n/c
Pin5=GND
Pin6=n/c
Pin7=WHELTICK
Pin8=Forward
Pin9=12V