

TALIN™ Inertial Land Navigator



POSSIBILITIES OF NAVIGATION. *MADE EASY.*

**The continued evolution of the
proven, best-value navigation
system for the digital battlefield**

Honeywell

TALIN™

Flexible, reliable, best-value INS/GPS navigator



System Features

- Honeywell's next generation ring laser gyro technology combined with the world's best accelerometers for unparalleled performance in the most demanding military and commercial environments without the need for secondary shock isolation.
- Single system plug "N" play across multiple platforms - auto-configuration adaptable.
- Align while stationary or on the move.

- Multiple accuracy configurations to meet different applications requirements.
- Over 15,000 systems from the TALIN family fielded on over 60 military and commercial platforms worldwide including combat vehicles, sensor platforms, towed and self-propelled weapons, survey applications, and mining equipment.

System Characteristics

Installation

- Can be hard mounted in any orientation

Reliability

- MTBF: >50,000 hours (TALIN demonstrated)

Power Requirements

- 18-32 Vdc: <26 watts*

Thermal Operating Range

- No cooling required:
-46°C to 71°C (-51°F to 160°F)

Navigation Sensors

- Standard/Internal: 3-axis inertial sensors
- Optional/External: VMS, PLGR, DAGR

Software

- Modular – partitioned for cost-effective system missionization
- Field upgradeable

Weight

- <13 pounds (<6kg)

Interfaces

- Standard: 1553A&B/RS-422/RS-232 serial host interface
- Optional: Additional RS-422/RS-232 data interface, turret encoder, laser range finders

Form Factor - (excluding flanges & connectors)

- Approx. 5.4 H x 7.6 W x 8.6 L inches
- Approx. 14 H x 19 W x 22 L cm

**Application and configuration dependent*

Performance	TALIN 2000	TALIN 3000	TALIN 4000	TALIN 5000	TALIN 6000
Horizontal Pos					
INU only	35m	25m	18m	12m	6m
INU/VMS	35m	25m	18m	12m	10m
INU/VMS/GPS PPS	<10m CEP	<10m CEP	<10m CEP	<10m CEP	<10m CEP
INU/VMS/GPS SPS	<60m CEP	<60m CEP	<60m CEP	<60m CEP	<60m CEP
Heading/Pointing Accuracy					
Specified Accuracy (RMS) at ±65° Latitude	<4.0 mils	<2.0 mils	<1.0 mils	<0.70 mils	<0.50 mils
sec(lat)	<2.11 mils	<0.85 mils	<0.42 mils	<0.3 mils	<0.21 mils
Pitch and Roll Accuracy					
(RMS)	<1.00 mils	<1.00 mils	<0.50 mils	<0.35 mils	<0.25 mils
Max Alignment Time					
Maximum Static Alignment Time	<5.0 minutes	<5.0 minutes	<10.0 minutes	<15.0 minutes	<20.0 minutes
Maximum Dynamic Alignment Time	<12.0 minutes	<12.0 minutes	<12.0 minutes	<16.0 minutes	<16.0 minutes
Typical Alignment Time (28° Latitude)	<2.0 minutes	<2.5 minutes	<3.0 minutes	<3.5 minutes	<4.0 minutes

Values shown are per definitions in TALIN system specifications

Honeywell Aerospace

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POSSIBILITIES OF NAVIGATION. *MADE EASY.*

**Specialized inertial navigation
solution for high shock
artillery environments**

aTALIN™

Ultra-rugged, reliable, best-value INS/GPS navigator with embedded GPS receiver



- Align while stationary or on the move.
- Multiple accuracy configurations to meet different applications requirements.
- Over 15,000 systems from the TALIN family fielded on over 60 military and commercial platforms worldwide including combat vehicles, sensor platforms, towed and self-propelled weapons, survey applications, and mining equipment.

Thermal Operating Range

- No cooling required:
-46°C to 71°C (-51°F to 160°F)

Navigation Sensors

- Standard/Internal: 3-axis inertial sensors and PPS MPE-S or SPS Polaris Link GPS Receiver
- Optional/External: VMS

Software

- Modular – partitioned for cost-effective system missionization.
- Field upgradeable

Weight

- <24 pounds (11kg)

Interfaces

- Standard: 10/100 Ethernet
- Optional: RS-422/RS-232

Form Factor - (excluding flanges & connectors)

- Approx. 6.8 H x 9.5 W x 12.0 L inches
- Approx. 17 H x 24 W x 30 L cm

**Application and configuration dependent*

System Features

- Honeywell's next generation ring laser gyro technology combined with the world's best accelerometers and protected by an enhanced internal isolation system for unparalleled performance in the most demanding military and commercial environments, including mounted directly on artillery platforms.
- Does not require external: isolation, GPS receiver, or GPS antenna.
- Single system plug "N" play across multiple platforms - auto-configuration adaptable.

System Characteristics

Installation

- Can be hard mounted in any orientation (Shock tolerance maximized when connectors are forward or aft).

Reliability

- MTBF: >50,000 hours (TALIN demonstrated)

Power Requirements

- 23–33 Vdc: <40 watts*

Performance	aTALIN 2000	aTALIN 3000	aTALIN 4000	aTALIN 5000	aTALIN 6000
Horizontal Pos					
INU only	35m	25m	18m	12m	6m
INU/VMS	35m	25m	18m	12m	10m
INU/VMS/GPS PPS	<10m CEP	<10m CEP	<10m CEP	<10m CEP	<10m CEP
INU/VMS/GPS SPS	<60m CEP	<60m CEP	<60m CEP	<60m CEP	<60m CEP
Heading/Pointing Accuracy					
Specified Accuracy (RMS) at ±65° Latitude	<4.0 mils	<2.0 mils	<1.0 mils	<0.70 mils	<0.50 mils
sec(lat)	<2.11 mils	<0.85 mils	<0.42 mils	<0.3 mils	<0.21 mils
Pitch and Roll Accuracy					
(RMS)	<1.00 mils	<1.00 mils	<0.50 mils	<0.35 mils	<0.25 mils
Max Alignment Time					
Maximum Static Alignment Time	<5.0 minutes	<5.0 minutes	<10.0 minutes	<15.0 minutes	<20.0 minutes
Maximum Dynamic Alignment Time	<12.0 minutes	<12.0 minutes	<12.0 minutes	<16.0 minutes	<16.0 minutes
Typical Alignment Time (28° Latitude)	<2.0 minutes	<2.5 minutes	<3.0 minutes	<3.5 minutes	<4.0 minutes

Values shown are per definitions in aTALIN system specifications

Honeywell Aerospace

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gTALIN™ Inertial Land Navigator (with embedded GPS)



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System Features

- Honeywell's next generation ring laser gyro technology combined with the world's best accelerometers and coupled with an embedded GPS receiver for unparalleled performance in the most demanding military and commercial environments without the need for secondary shock isolation.
- Single system plug "N" play across multiple platforms - auto-configuration adaptable.
- Align while stationary or on the move.

- Multiple accuracy configurations to meet different applications requirements.
- Over 15,000 systems from the TALIN family fielded on over 60 military and commercial platforms worldwide including combat vehicles, sensor platforms, towed and self-propelled weapons, survey applications, and mining equipment.

System Characteristics

Installation

- Can be hard mounted in any orientation

Reliability

- MTBF: >50,000 hours (TALIN demonstrated)

Power Requirements

- 18-32 Vdc: <30 watts*

Thermal Operating Range

- No cooling required: -46°C to 71°C (-51°F to 160°F)

Navigation Sensors

- Standard/Internal: 3-axis inertial sensors and PPS MPE-S or SPS Polaris Link GPS Receiver
- Optional/External: VMS

Software

- Modular – partitioned for cost-effective system missionization
- Field upgradeable

Weight

- <15 pounds (<7kg)

Interfaces

- Standard: 1553A&B/RS-422/RS-232 serial host interface
- Optional: Additional RS-422/RS-232 data interface, turret encoders, laser range finders

Form Factor - (excluding flanges & connectors)

- Approx. 5.4 H x 7.6 W x 10.3 L inches
- Approx. 14 H x 19 W x 26 L cm

**Application and configuration dependent*

Performance	gTALIN 2000	gTALIN 3000	gTALIN 4000	gTALIN 5000	gTALIN 6000
Horizontal Pos					
INU only	35m	25m	18m	12m	6m
INU/VMS	35m	25m	18m	12m	10m
INU/VMS/GPS PPS	<10m CEP	<10m CEP	<10m CEP	<10m CEP	<10m CEP
INU/VMS/GPS SPS	<60m CEP	<60m CEP	<60m CEP	<60m CEP	<60m CEP
Heading/Pointing Accuracy					
Specified Accuracy (RMS) at ±65° Latitude	<4.0 mils	<2.0 mils	<1.0 mils	<0.70 mils	<0.50 mils
sec(lat)	<2.11 mils	<0.85 mils	<0.42 mils	<0.3 mils	<0.21 mils
Pitch and Roll Accuracy					
(RMS)	<1.00 mils	<1.00 mils	<0.50 mils	<0.35 mils	<0.25 mils
Max Alignment Time					
Maximum Static Alignment Time	<5.0 minutes	<5.0 minutes	<10.0 minutes	<15.0 minutes	<20.0 minutes
Maximum Dynamic Alignment Time	<12.0 minutes	<12.0 minutes	<12.0 minutes	<16.0 minutes	<16.0 minutes
Typical Alignment Time (28° Latitude)	<2.0 minutes	<2.5 minutes	<3.0 minutes	<3.5 minutes	<4.0 minutes

Values shown are per definitions in gTALIN system specifications

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eTALIN II™ Inertial Land Navigator (with embedded GPS)



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System Features

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- Single system plug "N" play across multiple platforms - auto-configuration adaptable.
- Align while stationary or on the move.

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System Characteristics

Installation

- Can be hard mounted in any orientation

Reliability

- MTBF: >50,000 hours (TALIN demonstrated)

Power Requirements

- 18-36 Vdc: <30 watts*

Thermal Operating Range

- No cooling required: -46°C to 71°C (-51°F to 160°F)

Navigation Sensors

- Standard/Internal: 3-axis inertial sensors and PPS MPE-S or SPS Polaris Link GPS Receiver
- Optional/External: VMS

Software

- Modular – partitioned for cost-effective system missionization
- Field upgradeable

Weight

- <16 pounds (<7kg)

Interfaces

- Standard: 10/100 Ethernet
- Optional: RS-422/RS-232

Form Factor - (excluding flanges & connectors)

- Approx. 5.6 H x 7.1 W x 10.3 L inches
- Approx. 14 H x 18 W x 26 L cm

**Application and configuration dependent*

Performance	eTALIN II 2000	eTALIN II 3000	eTALIN II 4000	eTALIN II 5000	eTALIN II 6000
Horizontal Pos					
INU only	35m	25m	18m	12m	6m
INU/VMS	35m	25m	18m	12m	10m
INU/VMS/GPS PPS	<10m CEP	<10m CEP	<10m CEP	<10m CEP	<10m CEP
INU/VMS/GPS SPS	<60m CEP	<60m CEP	<60m CEP	<60m CEP	<60m CEP
Heading/Pointing Accuracy					
Specified Accuracy (RMS) at ±65° Latitude	<4.0 mils	<2.0 mils	<1.0 mils	<0.70 mils	<0.50 mils
sec(lat)	<2.11 mils	<0.85 mils	<0.42 mils	<0.3 mils	<0.21 mils
Pitch and Roll Accuracy (RMS)					
	<1.00 mils	<1.00 mils	<0.50 mils	<0.35 mils	<0.25 mils
Max Alignment Time					
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Values shown are per definitions in eTALIN II system specifications

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INU/VMS/GPS SPS	<60m CEP	<60m CEP	<60m CEP
Heading/Pointing Accuracy			
Specified Accuracy (RMS) at ±65° Latitude	<4.0 mils	<2.0 mils	<1.0 mils
sec(lat)	<2.11 mils	<0.85 mils	<0.42 mils
Pitch and Roll Accuracy (RMS)			
	<1.00 mils	<1.00 mils	<0.50 mils
Max Alignment Time			
Maximum Static Alignment Time	<5.0 minutes	<5.0 minutes	<10.0 minutes
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