

Autopilot System Input / Output Specifications

Inputs:-

Main Supply Voltage Range	18 – 40Vdc
Single / Backup Supply Voltage Range	11– 40Vdc
Power Consumption	10W
Illumination Max	2W

Mag Heading Input Port

Navitron HSC etc.	Coil Type HSC 1 or HSC 2
Resolution	0.25°

NMEA 0183 Heading Input Port

Channel 1 / 2	Mag	Gyro
NMEA 0183 / IEC61162-1 or -2 (Gyro /Mag and 4800 / 38400 baud Selectable)	\$XXHDM	\$XXTHS
	\$XXHDG	\$XXHDT
	\$XXHCC	\$XXHDM
	\$XXTHS	\$XXHDG
	\$XXHDT	\$XXHCC
	\$XXROT	\$XXROT

Heading Input Resolution 0.1°

Track Steer Data Input Port

NMEA 0183 IEC 61162-1 or -2 Track Data from GPS / Track Plotter	\$XX APB, \$XXRMB, \$XXXTE, \$XXHTC, \$XXHSC, \$XXAPA, \$XXRMC
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N2K Input Port (PGNs Accepted)

ISO Request	059904
Heading / Track Control	127237
Vessel Heading	127250
Rate of Turn	127251
Magnetic Variation	127258
COG & SOG Rapid Update	129026
Cross Track Error	129283
Navigation Data	129284
Direction Data (COG & SOG)	130577
Load Equivalency Number (LEN)	1

Op. Temp. Range	-20 to +60 °C
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Compass Safe Distance

Control Unit	0.5m
Distribution Unit	0.5m

Mechanical Data	Control Unit	Distribution Unit
Width	192mm	240mm
Height	120mm	310mm
Depth – (behind bezel for Control Unit)	80mm	75mm
IEC 60945 Equipment Category	Protected	Protected

Outputs:-

NMEA 0183 / IEC 61162-1 or -2 Heading / Rudder Position Data Output Port (Isolated RS422)

Update Rate	Selectable at 1Hz, 10Hz, 20Hz or 40Hz (>10Hz at 38K4 baud only)			
	Hz	Mag Heading	True Heading	ROT
1	\$AGHDG	\$AGHDT \$AGHTS	\$AGROT	\$AGRSA
10	\$AGHDG	\$AGHDT or \$AGHTS	\$AGROT (5Hz)	\$AGRSA (5Hz)
20	\$AGHDG	\$AGHDT \$AGHTS	\$AGROT (10Hz)	\$AGRSA
40	\$AGHDG	\$AGHDT or \$AGHTS	\$AGROT (10Hz)	\$AGRSA (20Hz)

N2K Output PGNs

ISO Acknowledgement	059392
ISO Request	059904
ISO Address Claim	060928
PGN List	126464
Product Information	126996
Rudder	127245
Vessel Heading	127250

Solid State Solenoid Switching (Rudder Control)

Polarity	Common +VE / -VE Selectable
Max Rating	5A @ 11-40Vdc Max

System Alarms

Main Power Fail	Watch Alarm Timeout
Back Up Power Fail	OHA Limit
Heading Data Fail	Control Unit Fail
Track Data Fail	Course Change
Steering Fail	Track Heading Change
Distribution Unit Fail	Remote Control Engaged
Limit Switch Status	Rudder Ref Unit Fail

Alarm Contacts are available (rated 3A) for Watch Alarm and Power / General Failure.

