

**SPECIFICATIONS OF AIS RECEIVER
FA-40**

1 GENERAL

- 1.1 Type AIS Receiver
- 1.2 RX capacity 2250 report/minute, 1 channel
4500 report/minute, 2 channel
- 1.3 RX system Dual wave simultaneous reception
- 1.4 Frequency switching Automatic (manual switching available)
- 1.5 Initialization Within 30 seconds after power-on
- 1.6 Regulations IEC 62287-2, receiver standard applicable

2 AIS RECEIVER

- 2.1 Frequency range 156.025 MHz to 162.025 MHz (F1D)
- 2.2 Oscillator frequency 1st local oscillator: f+ (46.35/58.05 MHz),
2nd local oscillator: 45.9/57.6 MHz
- 2.3 Intermediate frequency 1st: 46.35/58.05 MHz, 2nd: 450 kHz
- 2.4 Receiving method Double super heterodyne
- 2.5 Sensitivity -107 dBm or less (PER20% or less)
- 2.6 Error at high input level -77 dBm (PER2% or less), -7 dBm (PER10% or less)
- 2.7 Co-channel rejection -10 dB or more
- 2.8 Adjacent channel selectivity 70 dB or more
- 2.9 Spurious response 70 dB or more
- 2.10 Inter-modulation 65 dB or more
- 2.11 Sensitivity suppression 86 dB or more (± 5 MHz, ± 10 MHz)

3 GPS RECEIVER

- 3.1 Number of channel GPS: 12 channels parallel, SBAS: 2 channels, 14 satellites
- 3.2 Receiving frequency 1575.42 MHz, C/A code
- 3.3 Position accuracy GPS: 13 m approx. (2drms, HDOP<4)
- 3.4 Tracking velocity 1000 kn
- 3.5 Position fixing time 90 s approx.
- 3.6 Update interval 1 s
- 3.7 DGPS data correcting By AIS information

4 INTERFACE

- 4.1 Number of port
 - Serial 2 ports, IEC61162-1, 4800/38400 bps
 - NMEA2000 1 port, External power required 12-24 VDC (9-32 V),
LEN=1@9V
 - USB 1 port, USB2.0, Full speed, for maintenance
- 4.2 Data sentence
 - Input ACA, ACK, AIQ, DTM, GBS, GGA, GLL, GNS, HDT, OSD, RMC,
SSD, THS, VBW, VSD, VTG
 - Output ABK, ACA, ACS, ALR, GGA, GLL, RMC, SSD, TXT, VDM, VDO,
VER, VSD, VTG

4.3 Output P sentence

PFEC pidat

4.4 NMEA2000 PGN

Input 059392/904, 060160/416/928, 065240, 126208, 127250

Output 059392/904, 060928, 126208/464/992/993/996/998,
127258, 129025/026/029/038/039/040/041/540,
129792/793/794/795/796/797/798,
129800/801/802/803/804/805/806/807/809/810/811/812**5 POWER SUPPLY**

12-24 VDC (9.6-31.2 V): 0.3-0.2 A

6 ENVIRONMENTAL CONDITIONS**6.1 Ambient temperature**

Antenna unit -25°C to +70°C

AIS receiver -15°C to +55°C

6.2 Relative humidity 93% or less at +40°C**6.3 Degree of protection**

Antenna unit IP56

AIS receiver IP55

6.4 Vibration IEC 60945 Ed.4**7 UNIT COLOR**

7.1 Antenna unit N9.5

7.2 AIS receiver N1.0