

## SPECIFICATIONS OF AUTOPILOT NAVpilot-700

### 1 CONTROL UNIT

1.1	Display	Monochrome dot matrix LCD
1.2	Effective display area	85.2 x 85.2 mm (160 x 160 dot)
1.3	Backlight	8 steps
1.4	Contrast	16 steps
1.5	Useable set	6 sets

### 2 PROCESSOR UNIT

2.1	Steering mode	STBY, Auto, Dodge, Turn, Remote, Advanced auto*, Navigation*, Wind*, FishHunter <sup>TM*</sup>
2.2	Weather mode	AUTO, MANUAL-CALM/ MODERATE/ ROUGH
2.3	Rudder gain	AUTO/1-20 (Manual)
2.4	Counter rudder	AUTO/0-20 (Manual)
2.5	Trim gain	AUTO/1-20 (Manual)
2.6	Course change speed	1-10 deg/s
2.7	Rudder angle settings	10-45 deg
2.8	Alarm	Heading deviation, Cross-track error, Ship's speed*, Depth*, Water temperature*, Wind*, Watch, Log trip*
2.9	Motor/ Solenoid drive	25A continuous, 50A for 5 seconds
2.10	Clutch/ Bypass drive	3A

\*: external data required

### 3 IPS INTERFACE UNIT (OPTION)

3.1	Control system	EVC system
3.2	Steering mode	Auto, Manual, Dodge, Turn, Remote, Advanced auto*, Navigation*, Wind*, FishHunter <sup>TM*</sup> , Override
		*: external data required
3.3	Rudder function	Weather states, Rudder angle, Rudder gain, Trim gain, Course change speed (setting range: same as processor unit)

### 4 INTERFACE

4.1	Number of port	
	NMEA0183	2 ports (includes the port for IPS interface unit)
	CAN bus	1 port
	Relay contact output	2 ports, alarm and status, 30V max., 3A max.
	Contact signal input	2 ports, event switch control
	USB	1 port, for maintenance only

- 4.2 Data sentences NMEA 0183 Ver1.5/2.0/3.0
- Input AAM, APB, BOD, BWC, BWR, DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWV, ROT, RMB, RMC, RSA, THS, TLL, VHW, VTG, VWR, VWT, XTE, ZDA
- Output DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWV, RMB, RMC, ROT, RSA, VHW, VTG, VWR, VWT, ZDA
- 4.3 CAN bus PGN (NMEA2000)
- Input 059392/904,060928,061184,126208/720/992/996, 127250/251/258/488/489,128259/267, 129025/026/029/033/283/284/285, 130306/310/311/312/313/314/577/880/818/821/827
- Output 059392/904,060928,061184,126208/464/720/992/996, 127237/245/250/251/258,128259/267, 129025/026/029/033/283/284/285, 130306/310/311/312/822/823/827

## 5 POWER SUPPLY

- 5.1 Processor unit (w/ control units) 12-24 VDC: 4.0-2.0 A (control unit: 6 sets)
- 5.2 IPS interface unit 12-24 VDC: 0.4-0.2 A

## 6 ENVIRONMENTAL CONDITION

- 6.1 Ambient temperature -15°C to +55°C
- 6.2 Relative humidity 95% or less at 40°C
- 6.3 Degree of protection
- Control unit IP56
- Processor unit IP20
- Rudder reference unit/ IPS I/F IPX5
- 6.4 Vibration IEC 60945 Ed.4

## 7 UNIT COLOR

- 7.1 Control/processor unit N2.5
- 7.2 Remote controller N3.0 (FAP-5552/6232), N1.5 (FAP-6212/6222)
- 7.3 Rudder reference unit N1.5
- 7.4 Junction box/ IPS I/F N3.0