

**SPECIFICATIONS OF THE COLOR VIDEO SOUNDER  
FCV-30**

**1. DISPLAY**

- 1.1 Display Optional supply or commercial monitor  
VGA (1024x784), SXGA (1280x1024)
- 1.2 Display Range Range: 10-5000 m, Shift: 0-5000 m, Zoom range: 2-200 m
- 1.3 Display Mode SPLIT, 3 beam, SPLIT + 2 beam, User1, User2, User3
- 1.4 Display Window Status, Temperature graph, Bottom discrimination graph, Sonde graph, Fish size histogram, Target position graph, Bottom lock, Bottom zoom, Marker zoom
- 1.5 Display Advance Speed 8 settings (Freeze, 1/8, 1/4, 1/2, 1/1, 2/1, 4/1, 8/1, SYNC)
- 1.6 Alarm Bottom alarm, Fish alarm, Bottom fish alarm, Temperature alarm
- 1.7 A-scope Display selectable among 1/6, 1/8 or 1/10 of screen width. Each transmission is displayed on A-scope.
- 1.8 Record Raw data, image data

**2. TRANSCEIVER**

- 2.1 Output Power 4 kW
- 2.2 TX Rate Max. 1200 pulse/min
- 2.3 TX Frequency 38 kHz
- 2.4 Beam Control Range Bow, stern, port, starboard within 20°

**3. DATA I/O**

- 3.1 I/O Port NMEA, CIF, USB (2.0), LAN (10 BASE-T/100BASE-TX)
- 3.2 NMEA Input Sentences IEC61162-1, NMEA 0183 Ver. 2.0/3.0  
BWC, GGA, GLC, GLL, GNS, GTD, MTW, RMA, RMB, RMC, VHW, VTG, ZDA, att, hve
- 3.3 CIF Input Data Water temperature, Net depth, Sonde number
- 3.4 NMEA Output Sentences IEC61162-1, NMEA 0183 Ver. 1.5/2.0/3.0  
SDDBS, SDDBT, SDDPT, SDTLL, YCMTW, SDvrm, SDbtm

**4. POWER SUPPLY**

- 4.1 Processor Unit 100-240 VAC: 3A-2A
- 4.2 Transceiver Unit 100-120/200-240 VAC: 5A-3A

## 5. ENVIRONMENTAL CONDITION

### 5.1 Useable Temperature Range

Processor Unit	0°C to +40°C
Transducer	-5°C to +35°C
Transceiver Unit	-15°C to +45°C (with Motion Sensor) -15°C to +55°C (no Motion Sensor)
Control Unit	-15°C to +55°C

5.2 Relative Humidity Less than 95% (at 40°C)

### 5.3 Water Resistance

Processor Unit	IP20 (not waterproof)
Control Unit	Front panel: IP22, Other than front panel: IP20
Transceiver Unit	Not waterproof

5.4 Vibration (IEC60945 Ed. 4) From 2 Hz-5 Hz to 13.2 Hz: Amplitude  $\pm 1$  mm  $\pm 10\%$   
(max. acceleration at 13.2 Hz is  $7\text{m/s}^2$ )  
13.2 Hz to 100 Hz: Max. acceleration  $7\text{m/s}^2$  (fixed)

## 6. COATING COLOR

6.1 Processor Unit	2.5GY5/1.5
6.2 Transceiver Unit	2.5GY5/1.5
6.3 Control Unit	N2.0