

# CPV350 GPS Chart Plotter with VHF FM Marine Transceiver

## SPECIFICATIONS

GENERAL	
Input Voltage	13.8 VDC ±20 %
Current drain	Standby 1.2 A Receive 1.7 A Transmit 6.5 A
Dimensions	6.7" H x 10.9" W x 5.4" D (170 H x 276 W x 138 D mm)
Flush-Mount Dimensions	5.4" H x 7.2" W x 4.9" D (136 H x 183 W x 124 D mm)
Weight	4.8 lbs (2.2 kg)
Display	7 inch TFT 256 Color LCD (800x 480 resolution)
TRANSMITTER	
RF Output	25 / 1 W
Conducted Spurious Emissions	80 dB(Hi); 60 dB(Lo)
Modulation	16K0F3E, for DSC 16K0G2B
Frequency Stability	±0.0005 %
FM Hum and Noise	50 dB
RECEIVER	
Sensitivity	12dB SINAD 0.25 µV 12dB SINAD (70CH Receiver) 0.28 µV
Squelch Sensitivity	0.15 µV
Selectivity (TYP.)	-80 dB (Spurious and Image Rejection) -80 dB (Intermodulation & Rejection at 12dB SINAD)
Audio output	4.5 W
Frequency Stability	±0.0005 %
DSC format	Class D EN301 025 V1.2
Hailer power	30 W
GPS CHART PLOTTER	
User Points (Marks/Waypoints)	1000
Routes	20 (Max. 50 Waypoints each)
Track Points	1000
NMEA Input Output	3 Input/Output Interface NMEA-0183
Cartography	C-MAP NT+/MAX C-CARD
NMEA sentences	GLL, VTG, BWC, WCV, APA, APB, HDG, BOD, XTE, RMA, RMB, RMC, GGA, HSC, DBT, DPT, MTW, AND VHW

Standard Horizon reserves the right to make changes and enhancements to products at our discretion. Current specifications are therefore subject to change without notice.

GPS WAAS SMART Receiver Specifications	
Physical Characteristics	
Color	Ivory white
Dimensions	3.8" in diameter x 1.3" in height (flush mounted) or 2.4" on flagpole mount
Weight (without cable)	5.6 oz (without cable)
Cable GPH 10	White 5 ft 8x28AWG cable with 6 pins female connector
Electrical Characteristics	
Input Voltage	10 VDC to 35 VDC unregulated
Input Current	112 mA @ 12 VDC 60 mA @ 24 VDC 45 mA @ 35 VDC
GPS Receiver Sensitivity	-145 dBW minimum
GPS Performance	
Receiver	WAAS (North America), EGNOS (Europe), MSAS (Asia)
Geodetic Datum	WGS84
Channels	12
Frequency	1575.42 MHz (L1, C/A code)
Acquisition Time (Approximate)	
Reacquisition	less than 1 second
Hot Start	8 seconds (typical)
Warm Start	< 40 seconds (typical)
Cold Start	< 45 seconds (typical)
Accuracy	
Position	less than 10', 95 % of the time
Speed	0.3 Knots RMS
NMEA Output Messages/Update Rate	
GGA	1 second
GLL	1 second
VTG	1 second
RMC	1 second
GSA	3 seconds
GSV	3 seconds
PCMPD	1 second

## OPTIONAL ACCESSORIES

<b>Black Box Fish Finder FF520</b> Dual Frequency Black Box Fish Finder (500W or 1000W depending on transducer connected) 500W Transducers DST520 - Nylon depth only DST521 - Transom mount depth, temp speed DST523 - Bronze depth temp DST525 - In-hull depth only 1000W Transducers DST526 - In-hull depth only DST528 - Bronze thru-hull depth temp •Dimensions 7.62" W x 2.19" H x 6.87" D •Weight 2.20 lb •Frequency 50/200 kHz •Max Depth 1200 ft @ 200 kHz 4000 ft @ 50 kHz •Power output 500 W or 1000 W, depend on transducer •Voltage range 10-35 VDC •Current drain STBY: 170 mA @ 10 VDC MAX: 1.42 A @ 12 VDC	 <b>CMP25B/W</b> Remote-Access Microphone (Black/White)	 <b>220SW</b> Hailing Horns 5 inch round horn (small)	 <b>240SW</b> Hailing Horns 5x7 horn	 <b>CVS2500</b> Voice Scrambler
	 <b>VH-310</b> Telephone Style Handset with Cradle	 <b>MLS-300</b> VHF Extension Speaker *Available in Black or White	 <b>MLS-310</b> VHF Extension 10W Amplified Speaker *Available in Black or White	 <b>CT-100</b> 23 ft Extension Cable for CMP25 or VH-310



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## A FAMILY OF COSMETICALLY MATCHED CHOICES

The CPV350 is one member of the family of marine electronics from STANDARD HORIZON that includes:



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# STANDARD HORIZON

GPS Chart Plotter  
 with VHF FM Marine Transceiver

# CPV350

## Chart Plotter

- 7-Inch Diagonal 256-Color TFT Sunlight Viewable LCD Display (Screen Resolution: 800 x 480)
- Fully Adjustable Backlighting and LCD Contrast
- 12 Channel GPS WAAS Smart Antenna
- Cartography: C-MAP NT+, C-MAP MAX capable
- Customizable Display Windows
- Dual Frequency Fish Finder Capable (with purchase of FF520)
- Split Screen Capability
- Worldwide Background Map Showing Detail up to 2.0 NM Included
- Stores 1000 User Waypoints
- NMEA Data pages

## Radio/Hailer

- 30 W Loud Hailer with Listen Back, 4 Fog Horns, Bells, and Whistles
- Commercial Grade **ITU Class D VHF**
- Complete Digital Selective Calling (DSC)
- Full Position Request and Send Functions
- CLEAR VOICE Noise Reduction Microphone with 16/9 Key and Channel Selection
- Tri-Station Capability (RAM+ and/or VH-310 Required)
- Oversized Rotary Channel Selector
- Channel Name Capability
- User Programmable Scan, Priority Scan, and Dual Watch
- Voice Scrambler (optional)

CLEAR VOICE<sup>®</sup>  
 NOISE REDUCTION TECHNOLOGY

**Integrated GPS Chart Plotter and VHF Hailer**



The Split screen (Chart and Fish finder) display requires optional FF520.

\*Simulated LCD Display

**MAX C-MAP NT**

**Class D DSC Transceiver**



Smart GPS Antenna Included

# GPS CHARTPLOTTER, MARINE VHF, LOUD HAILER WITH FOG SIGNALS ALL IN ONE PACKAGE, NOW THAT'S INTEGRATION

**Integrated GPS Chart Plotter and VHF/Hailer**

**MAX C-MAP NT**

**CLEAR VOICE®**  
NOISE REDUCTION TECHNOLOGY

**Class D DSC Transceiver**



## Chart Plotter

**TFT 256 Color 7-Inch Diagonal (16:9) LCD Display (Screen Resolution: 800 x 480)**

There is no question about it. With a big, bold display there is no mistaking the information. It can easily be seen in locations where the Chart Plotter cannot be mounted directly in front of you.

**User Points : 1000/Routes: 20 (Max 50 waypoints each)**

Beauty and brains! Not only does the CPV350 boast a beautiful display, it can also be loaded with enough Waypoints and Marks to guarantee you will always arrive at your destination.

**Cartography: C-Map NT+ or MAX Compatible**

C-MAP is the best cartography available. The CPV350 comes pre-loaded with detailed cartography down to the 2NM scale. If you require greater detail, C-MAP offers many different chart configurations to suit your needs.

**Display Mode: GPS Status, Chart, Navigation, Highway, Celestial, DSC Log, NMEA Display, Fish Finders (FF520 required)**

Get the information you need when you need it. All of the navigation screens can be customized to suit your needs. Change the data fields to display any available navigation information. Split the screens for greater functionality.

- Fully adjustable backlighting and LCD Contrast
- 12 Channel GPS WAAS smart antenna
- Split screen capability
- World wide background map showing detail up to 2.0 NM included

## Radio/Hailer

**30 W Loud Hailer with Listen Back and 4 Fog Horns, Bells & Whistles**

When having a VHF/chart plotter is not enough, connect one of the optional PA horns to the CPV350 and you now have a full functioning Loud Hailer complete with 4 fog signals, bells, whistles, horns, and sirens.

**Display Shows Channel Names and Repeats the GPS Information**

All the information you need right at your fingertips. Customizable channel naming allows you to easily change the channel name for greater ease of use and channel recognition. Position, date, and time are also displayed when connected to a GPS.

**Commercial Grade ITU Class D DSC VHF**

With a built in dedicated DSC receiver you won't miss a single call. Now you can receive on the VHF and still simultaneously receive DSC calls.

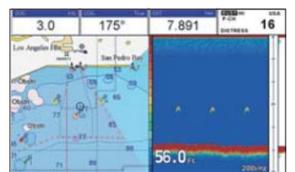
- Complete Digital Selective Calling (DSC)
- Full position request and send functions
- CLEAR VOICE noise reduction microphone with 16/9 key and channel selection
- Tri-station capability (RAM+ and/or VH-310 required)
- Oversize rotary channel selector
- Channel name capability
- User programmable Scan, Priority Scan, and Dual Watch
- Voice scrambler (Optional)



## Main Chart



## Chart / Fish



## Navigation



## Celestial



Actual Size

Actual Size