

ValueGuide

Our best value analog/digital portable radios

The selection of a digital portable radio can be condensed down to a single consideration - Does it do what you want it to do at a price you are willing to pay? The following is an evaluation of three UHF portable radios, all priced under \$400. The available features are listed on the left with applicable capabilities listed for each radio on the right. All of these radios compete with the Motorola CP200d which is not listed (See Note 7).

Features and Functions



CSI CS600/700



Hytera PD702



Hytera PD602



Price

Standard speaker-microphone	\$29 (See Note 6)	\$49 (See Note 6)	\$49 (See Note 6)
Heavy duty speaker-microphone	\$39	\$59	\$59
Replacement battery (OEM) std.	\$59	\$79 (2000 mAh)	\$49
Replacement battery high cap.	\$69 (2000 mAh)	\$89 (2500 mAh)	Not available
PC Programming kit (USB)	\$59	\$79	\$79
Warranty	1 year (See Note 2)	5 years (See Note 2)	2 years
Power output	4/2/1 watts	4/1 watts	4/1 watts
Audio output	1000 mW	500 mW	500 mW
Channel capacity (Analog/Digital)	32/1000	16/32	16/32
LCD Screen and DTMF Keypad	Yes	No	No
Eligible for flat radio repair (2)	Yes	Yes	No
Priority scan	Yes	Yes	Yes
Battery Type	1700 mAh LI (2000 Opt.)	2000 mAh Lithium Ion	1500 mAh Lithium Ion
Battery Life (Analog/Digital)	10 - 14 hours	11 - 16 hours	16 hours digital
Charger Type	Desk rapid (2-3 hours)	Desk rapid (2-3 hours)	Desk rapid (2-3 hours)
Emission Type	2 slot DMR/Analog	2 slot DMR/Analog	2 slot DMR/Analog
Frequency Range	400-470 MHz	400-470 MHz	400-527 MHz
2-Tone analog paging decode	(Available March 2014)	Yes	Yes
Pseudo Trunk (See Note 4)	No	Yes	Yes
Encryption	EDSI Standard	EDSI Standard	EDSI Standard
2-Way Text messaging capable	Yes	No	No
MIL-SPEC Rating	810F	810F	810G
IP Water resistance rating (3)	IP65	IP67	IP67
Size	4.45 x 2.18 x 1.38"	4.91 x 2.16 x 1.38"	4.68 x 2.12 x 1.06"
Weight	9.7 Ounces	11.84 Ounces	10.22 Ounces
GPS capable	Optional upgrade	Optional upgrade	Optional upgrade
Audible CH No. Announce	Yes	Yes	Yes
Intrinsically Safe Rated (5)	No	No	No
Specification sheet available at:	www.info4u.us/cs700.pdf	www.info4u.us/PD702.pdf	www.info4u.us/PD602.pdf

- (1) Take your choice, the CS-600 built for heavy work use or the CS-700 with advanced features, LCD display and more!
 - (2) PD702 has a 5 year warranty if purchased before 12/31/13. See www.info4u.us/TimeShare.pdf for other plans.
 - (3) See http://en.wikipedia.org/wiki/IP_Code for additional information on IP ratings.
 - (4) Provides a means of automatically selecting an available slot for immediate communications (No user action required).
 - (5) The lowest priced Intrinsically safe portable recommended is the analog [TC-700ExPlus.pdf](http://www.info4u.us/TC-700ExPlus.pdf) priced at \$449.
 - (6) For more information on Speaker-microphones, please see following page.
 - (7) CP200d not listed since prices are higher with no significant features or specifications exceeding listed products.
- Summary – The CS600/700 is lighter, louder and less expensive than other products plus the CS700 has text messaging capability and up to 1000 channel capability. The PD702 includes a 5 year warranty. The PD602 is a new offering.

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How to evaluate speaker-microphones



The price of a speaker microphone depends on basically five factors. The lowest priced microphones (as shown at the above left) are small, lightweight and very popular. Generally these microphones are not IP rated although most would be equal to an IP54 rating. The Larger microphone in the center is more rugged, larger, and has a larger, more durable cord. The least expensive models will use a two pin connector although other connectors are available. Top of the line American made microphones such as the Stone Mountain Phoenix (shown above on the far right) are field repairable and have an IP68 water submersible rating.

Prices will typically vary from \$29 to \$49 for the smaller lightweight models shown in the center above. An audio jack is available at the bottom to allow connection of an external earpiece (not included), if desired. There is no IP rating. Warranty is one year. Screw on type jacks commonly used with digital radio models and some top tier analog radios such as the F50V will add another \$20.

The ruggedized models with an IP54 rating (See above left) will normally range in price from \$39 to \$59 depending on whether the speaker-microphone is purchased as an accessory with a radio, or purchased directly from a good quality aftermarket supplier such as ARC, or Cobalt AV. As is the case with the lightweight models, the price will vary depending on the type of connector specified. The two pin connector shown above is included in our budgetary pricing. Screw on type connectors for digital and top tier analog radios will add another \$20. Warranty is two years.

The top of the line Stone Mountain Phoenix carries an IP68 water submersible rating and a two year warranty. This microphone is also field repairable (See brochure at www.info4u.us/Phoenix.Brochure.pdf). Although this microphone is available for all of our radios, it is best suited for use with top tier analog or digital radios since it is in the upper end of the price range at \$69 for the two pin model, and \$20 more for top tier analog or digital radios. If you have any questions, just give us a call at 800.489.2611.