



SmarTrunk Systems, Inc.

Innovation

- **Zero Delay**

When connected to a trunking system there is no need to wait for a channel assignment to start talking. You can start talking as soon as the PTT is pressed. SDR technology makes it easier to talk in critical environments where milliseconds counts and words cannot be missed.

- **Analog or digital**

For many radio users, migration from analog to digital implies significant added costs and compatibility issues. With our SDR technology, a single channel can be shared between analog and digital radios at the same time. The radios detect the type of protocol on the air and adjust the decoder to it. Radios can switch to analog or digital as the communication traffic requires it, making migration from analog to digital easier.

- **SDR (Smart Digital Radio) protocol**

Allows for great flexibility. Our Radio Technology lets the user select the type of digital modulation he wants to use. Standard DIGITAL FDM, Power save DIGITAL FDM, TDMA DIGITAL PMR (2 channels at the time over single channel) or hi-Q audio response by using lower compression rate (in selected models only). No other technology offers such flexibility.

- **Flexi Codec**

Our firmware let us support third party codecs to make the radio friendlier to future applications and interoperability. For example, the application of SILK codec (standard used by Skype) opens a gate to the interoperability with computers and IP environments.

- **SmartBattery**

The batteries are as smart as our radios. Our batteries exchanges information with the radio and the charger to provide the user with the most accurate information about its status, capacity, percentage of charge, charging cycles, temperature, etc. It will be very helpful in critical situations and it will also help to extend the life of the battery.



ST-2112
SmartDigital

Specifications



ST-2112			
GENERAL	SPECIFICATION	Portable UHF	Portable VHF
	Frequency Range	400/470 & 450/512	134/174
	Channels	512	
	Groups/Banks	64	
	Temperature range	- 30 °C ~ 60 °C (-22°F ~ +140°F)	
	Signaling	51 CTCSS tones / 183 DCS tones / 65534 Express Fleet IDs	
	Display	128x64 dots (multilanguage)	
	GPS	Optional	
	Channel Scan	Yes	
	BCLO / BTLO	Yes	
	Power Saver control	Yes	
	TOT	Yes	
	Radio Kill/Alive	Yes	
	Adjustable Power Selection	Auto + H/M/L	
	Key lock	Yes	
	Adjustable Squelch Level	16 Step	
	VOX	Yes	
	Talk Around	Yes	
	Password	Yes	
	Voice encryption	Voice Inversion/Multiple hop rolling	
TRANSMIT	Radio to Radio Cloning	Yes	
	Key Function selection	Yes	
	RF power	4 (W)	5 (W)
	Frequency Stability	+/- 1PPM	
	Bandwidth	12.5Khz/6.25 Khz.	
	Spurious emissions	-57dBC (typ)	
RECEIVER	FM HUM noise	45dBr typ	45dBr typ
	Analog harmonic distortion	3% typ (AF 1Khz, 40% deviation)	
	Digital Sensitivity	0.25uV (5% BER)	0.25uV (5% BER)
	Squelch Sensitivity	0.22uV (Threshold)	0.22uV (Threshold)
	Adjacent Channel selectivity	75dB typ	75dB typ
	Speaker Audio Power	1W	
	Distortion	<3%	

Highlights

- **Analog or digital operation**
- **Q - SDR**
- **Flexible codec**
- **Built in SmartXpress protocol:** Working in both modes (analog or digital)- 100% compatible with existing SmarTrunk Xpress systems.
- **Built in versatile analog signaling:** CTCSS - DCS - DTMF - 2-Tone - 5-Tone - MDC-1200 (main functionalities).
- **Native USB interface with Mini-USB connector:** Programming - Remote Control - Testing-Channel digital logger.
- **High speed data rate:** Adaptive data speed rate -Up to 9600 bauds on 12.5Khz bandwidth channel.
- **Expanded I/O port:** Analog/digital Telemetry (4 configurable pins) -Voice /data logger.
- **Large high definition display:** Easy read - Comfortable environment adjustment - Multi language- Uses Windows Fonts.
- **512 Channels:** Full programmable channel by channel - Personalities/templates - Up to 64 zones.
- **Analog voice encryption:** High level SmartEncryption - Voice inversion compatible with SmarTrunk products.
- **Flexible keypad:** Large buttons -Dual functions 3 programmable push-buttons -Cursor control on full keypad models-Emergency button-Programmable long push time.
- **Voting:** SmartXpress wide area voting compatible -Automatic Signal Selection running in Digital mode.
- **Audio:** 1W audio power -Acoustic treatment -Minimum volume control -Emergency volume override - Automatic Privacy mode.
- **Multi Scan Mode:** Standard mode- Priority Scan -Scan lists up to 16 groups -Dual watch.
- **RF Power:** Automatic power selection.
- **Zero Delay:** Instant voice in conventional systems analog or digital - Instant channel access in SmartXpress networks
- **Other features:** Lone worker - Man running- Man Down - Voice annunciation - In field firmware upgrade - Standard accessories compatible - Escalating Alarm.

ACCESSORIES



Secure Wear Earbud
Item #QBM0003PCB

On Line PTT & Microphone
Item #QBM100PCB

VOX Earpiece
Item #QBM1V2PCB

VOX Earpiece W/D-Ring
Item #QBM1V3PCB

Economical & Universal Earbud W/IN Line PTT
Item #QBM102PCB

Secure Wear Earbud (D-Ring) W/ON-Mic PTT
Item #QBM102PCB



Reliable Earbud W/ Transparent Acoustic Tube
Item #QBM108PCB

Reliable Earbud W/ Transparent Acoustic Tube
Item #QBM107PCB

Bone Induction Earpiece
Item #QBM1V2PCB

Headset
Item #QBM1V3PCB

Light Duty Speaker Remote, Compact & Sound, 360° Swivel Metal Clip
Item #QBM125PCB

Durable Remote Speaker Loud & Clear, 360° Swivel Metal Clip
Item #QBM109PCB

Contact us

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