

NOTICE OF BID

The City of Madison will receive bids for the purchase of four Two - Way Radio Interface's per Fire Department specifications.

Specifications are available at the City of Madison City Hall 615 Madison Ave, Madison Illinois 62060 during normal business hours.

Bids shall be delivered to City of Madison City Hall 615 Madison Ave, Madison Illinois 62060, **not later than 4:00pm on Tuesday, January 7th 2020**. The bids shall be opened at the regular meeting of the City Counsel at 6:30pm on this date.

The City of Madison reserves the right to reject any and all bids, to waive variations and to negotiate changes or additions. The City of Madison also reserves the right to select any or no bid regardless of the price based on the needs and operations of the Fire Department and to extend the time to submit bids and open bids.

NOTICE TO BIDDERS

Attached for your review are the specifications being utilized by the City of Madison Fire Department for the purchase of four Two - Way Radio Interface's.

Because the City of Madison does not possess the technical expertise to develop a comprehensive specification, we have utilized the specification provided by a manufacturer as a template. The ICRI (Incident Commanders Radio Interface) manufacturer provided these specifications to the City of Madison. The utilization of this specification is not intended to give ICRI or any other manufacturer an advantage in the competitive bidding process or to exclude any manufacturer from the process.

Nothing in this specification is intended to prevent any reputable manufacturer from submitting a proposal. In fact, we encourage any and all manufacturers to submit proposals. Any bidder may take exception to any portion of this specification and/or offer an alternative.

The City of Madison Fire Department shall make the ultimate determination as to whom meets the specifications and requirements of the City of Madison Fire Department.

ITEMIZED EQUIPMENT LIST

1ea ICRI unit to be stationary mounted.to consist of the following:

- 1ea ICRI-2P with 2ea radio I/O ports, 1ea handset I/O port, 1ea RJ22 phone I/O port.
for Single Talk Group
- 1ea 115V/230V adaptor
- 1ea ICRI handset with noise cancelling mic, PTT bar and coiled cord
- 1ea Audio buffer delay for all ports
- 1ea Motorola CDM1550 Mobile radio interface cable
- 1ea Motorola XTL1500 Direct interface cable with ignition sense and speaker leads

1ea ICRI unit to be mobile mounted.to consist of the following:

- 1ea ICRI-2P with 2ea radio I/O ports, 1ea handset I/O port, 1ea RJ22 phone I/O port.
for Single Talk Group
- 1ea DC input cable w/Neutrik Connector one end and stripped and tinned other end
- 1ea ICRI handset with noise cancelling mic, PTT bar and coiled cord
- 1ea Audio buffer delay for all ports
- 1ea Motorola PM1500 Mobile radio interface cable
- 1ea Motorola XTL1500 Direct interface cable with ignition sense and speaker leads

2ea ICRI unit to be portable environmentally protected to consist of the following:

- 2ea ICRI-2P, 2ea radio I/O ports, 1ea handset I/O port, 1ea RJ22 phone I/O port. for
Single Talk Group
- 2ea ICRI to 8 "AA" battery pack adaptor cable
- 2ea 8 "AA" battery pack
- 2ea Waterproof case (Pelican 1550) with fitted foam insert
- 1ea ICRI handset with noise cancelling mic, PTT bar and coiled cord
- 1ea Audio buffer delay for all ports
- 1ea Motorola XTS2500 Portable radio interface cable
- 1ea Motorola HT1250 Portable radio interface cable with environmental connector

Specifications: ICRI and Networking Options

ICRI (Incident Commanders' Radio Interface)

Description

A small, DC-powered, audio bridge which can link five dissimilar portable or mobile radios, other RF voice communications devices, a local handset/headset, and a telephone together for

RX Audio Input

Input Impedance: Unbalanced, 80 ohms nominal.

Frequency Response: 280 Hz to 3400 kHz \pm 2dB.

Input level: -32 dBm to + 12 dBm, no adjustment required.

TX Audio Output

Output Impedance: Unbalanced, 1000 ohms nominal.

Frequency Response: 280 to 3400 Hz \pm 2dB

Output Level: -40 to -18 dBm, adjustable (preset: -25dBm).

Audio Delay: Each net, individually adjustable 0 to 500 ms (preset: 250mSec).

Cellular/Auxiliary Input

Input Type: Unbalanced

Output Type: Unbalanced.

Input Range: -50 to +10 dBm, adjustable (preset: -50dBm).

Output Range: -40 to +3 dBm, adjustable (preset: -30dBm)

Input VOX

VOX Hang Time: Adjustable 0.5 to 2 seconds (preset: 1.5 seconds).

VOX Timeout Timer: Adjustable 30 to 90 seconds (preset: 60 seconds).

VOX Attack Time: Less 2 ms, nominal, for typical speech

VOX Threshold: Adjustable -32 to -6 dBm. (preset: -30dBm) (RX)
-50 to +10 dBm, adjustable (preset: -50dBm) (AUX)

Handset

Compatibility: Mil H-350/H handset

Initiation: PTT bar.

Handset Volume Control: 70 dB range.

Option: Variety of headsets and remote P-T-T switchover

Phone

ICRI-ICRI interconnect. Join two ICRI's (regardless of model) through Auxiliary Input port to expand the number of available I/O ports.

Bridge Unit ID circuit (Option)

Digitized, agency-defined message to identify an enabled ICRI gateway.

Broadcast automatically delay when other radio traffic present.

Broadcast message up to 15 seconds. Broadcast repeat periods available: 0 (disabled) , 5, 10 or 15 minutes.

Broadcast maybe disabled through three-position on-off power switch.

Bridge Link

ICRI-ICRI interconnect. Join two ICRI's (regardless of model) through Auxiliary Input port to expand the number of available I/O ports.

Networking (IP Option)

VoIP Input: Protocol Type: Non-proprietary, SIP. Connects to user provided network or local computer. Includes separate power switch to lower power consumption of ICRI when not in use.

Remote Talk Group Control circuit (CC Option)

PC: All ICRI control functions including talk group selection, muting and "ALL CALL" (all connected radios moved to single talk group) controlled via pc local or networked.

No annual license fees. No cost software updates.

Humidity: Up to 95% @ 55 degrees C.

FCC Part 15: unintentional radiators (CISPR 22) compliant

Shock: Suitable for mobile and portable environments; Mil 810 compliant.

Warranty: Provide product support for 10 years after purchase and a 5 year parts/labor/transport warranty

Vibration: Suitable for mobile and vehicular environments; Mil 810E compliant

Indicators: Power "OK" LED, power "LOW" LED, channel active LEDs (7).

ICRI Warranty

C-AT will provide a five year warranty for the ICRI unit and one year warranty for interconnect and power cables delivered to

- 1.0 C-AT warrants for a five year period that all ICRI units are free from defects in materials and workmanship. C-AT warrants the products sold conform to the specifications furnished by the customer or accepted by the customer as parts of the purchase contract. A defect is considered to be a failure in the materials or workmanship not resulting from the normal wear and tear of the equipment.

C-AT warrants for a one year period that all ICRI interconnect and power cables are free from defects in materials and workmanship. C-AT warrants the products sold conform to the specifications furnished by the customer or accepted by the customer as part of the purchase contract. A defect is considered to be a failure in the materials or workmanship not resulting from the normal wear and tear of the equipment.
- 2.0 C-AT's standard product warranty covers the repairs and replacement of any equipment which proves defective or fails to perform to agreed specifications.

C-AT corrects any defect in materials or workmanship at no cost to the purchaser at C-AT's Reston, Virginia facility.
- 3.0 The standard warranty offered by C-AT does not include repairs and replacements to the misuse or abuse of the equipment, nor repairs and replacements resulting from customer negligence.
- 4.0 C-AT will install any product enhancements or upgrades at the time of warranty repairs that can be made while maintaining full backward compatibility. Such work will only be performed with prior approval by the purchaser or his representative.
- 5.0 During the warranty period, transportation costs to and from the location where the equipment is located/or installed will be paid by C-AT. The agency will be provided with pre-paid shipping labels or C-AT's commercial carrier account number.
- 6.0 The warranty period will begin with the installation/acceptance date for each ICRI purchased.