



# प्रतिभूति कागज कारखाना, नर्मदापुरम-461005 ( म.प्र. )

( भारत प्रतिभूति मुद्रण तथा मुद्रा निर्माण निगम लिमिटेड की इकाई )

भारत सरकार के पूर्ण स्वामित्वाधीन

मिनिरल श्रेणी - 1 सीपीएसई एवं आई.एस.ओ. 9001 : 2015, 14001:2015, 45001:2018, 50001:2018 एवं आईईसी 17025:2017 प्रमाणित

## SECURITY PAPER MILL, NARMADAPURAM - 461005 (M.P.)

(A Unit of Security Printing & Minting Corporation of India limited)

Wholly Owned by Government of India

Miniratna Category - I CPSE & ISO 9001 : 2015, 14001:2015, 45001:2018, 50001:2018 & IEC 17025:2017 Certified

CIN : U22213DL2006GOI144763, GSTIN : 23AAJCS6111J3ZE



Tel. No. 07574-255259, Fax No. : 07574-255170, E-mail : [gm.spm@spmci.com](mailto:gm.spm@spmci.com), Website : <http://spmarmadapuram.spmci.com>

- 1 -

### शुद्धि पत्र - 2 / CORRIGENDUM-II

क्र. GeM/2022/B/2088864/

दिनांक - 21.05.2022

No. GeM/2022/B/2088864/

Dated - 21.05.2022

सन्दर्भ : GeM/2022/B/2088864/ दिनांक 21.04.2022

Ref. : . GeM/2022/B/2088864/ Dated 21.04.2022

उपरोक्त संदर्भित GeM निविदा सूचना दिनांक 21.04.2022 को हमारी वेबसाइट <http://spmarmadapuram.spmci.com> पर प्रकाशित की गयी थी, जिसके संदर्भ में निम्नानुसार संशोधन करते हुए शुद्धि पत्र जारी किया जा रहा है :

Against our above tender enquiry was published in the <http://spmarmadapuram.spmci.com> on dated 21.04.2022 Further, to this Corrigendum - 1 as below is being issued to the tender enquiry with the following amendments:

(1) Page No./Clause No.

(Reference: Webcast Tender Document) -

Bid Document

Technical Specification

1. VHF HAND-HELD, SYNTHESISED TRANS./RADIO

Specification of digital Non display handheld Radio - Page - 08

### के स्थान /FOR (Existing Entries) -

Specification of Digital Non display Handheld Radio:-

Frequency Range:- VHF band of 136 – 174 MHz

Channel Capacity:- 32 minimum

Power Supply:- 7.5 V (Nominal) ± 20%

Battery Type:- Rechargeable,

Capacity: minimum 2200mAh

Chemistry: Li-ion

Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power:- Analog: 14.5 hrs / Digital:- 18.5 hrs

Channel Spacing:- 12.5/25kHz

Frequency Stability (-30°C, +60°C, +25°C Ref):- ± .5 ppm

Analog Sensitivity:- (12dB SINAD) 0.3uV (0.22uV typical)

Digital Sensitivity:- 0.25 uV (0.19 uV typical)

Intermodulation (TIA603D):- -70 dB

Adjacent Channel Selectivity (TIA603D):- 45dB @ 12.5 kHz / 70dB @ 25 kHz

Spurious Rejection (TIA603D):- -70 dB

Rated Audio Output:- 0.5W

Audio Distortion @ Rated Audio:- 5% (3% typical)

Hum and Noise:- -40dB @ 12.5 kHz / -45dB @ 25 kHz

Audio Response:- TIA603D

Conducted Spurious Emission (TIA603D) :- -57dBm

RF Power Output:- 1W(Low Power) / 5W (high Power)

Audio Distortion:- less than 3%

Modulation Limiting:- ± 2.5kHz @ 12.5 kHz / ± 4.0kHz @ 25 kHz

FM Hum and Noise:- -40dB @ 12.5 kHz / -45dB @ 25 kHz

Conducted/Radiated Emission:- -36 dBm < 1GHz / -30 dBm > 1GHz  
Adjacent Channel Power:- 60dB @ 12.5 kHz / 70dB @ 25 kHz<sup>3</sup>  
Digital Vocoder Type:- AMBE+2™  
Digital Protocol:- STA ETSI TS 102 361-1, -2, -3Y  
MIL Standard:- 810C, 810D, 810E, 810F, 810G  
Operating Temperature -30°C / +60°C for Radio, -10°C / +60°C for Battery  
Thermal Shock Per MIL-STD  
Humidity Per MIL-STD  
ESD IEC 61000-4-2 Level 3  
Dust and Water Intrusion IEC60529 - IP54  
Packaging Test MIL-STD 810D and E  
Radio should have following features :-

Analog / Digital Voice Communications  
Dual Capacity Direct Mode  
Digital Mobile Radio (DMR) Standards Compliant  
Narrowbanding Compliant  
Restricted Access To System  
Lone Worker  
Priority / Non Priority Scan  
Remote Monitor  
Radio inhibit (decode only)  
Transmit Radio ID  
MDC / Quick Call II Signaling Systems  
Voice Announcement for Channel number, Battery Capacity, High/Low Power

Make :- No other make except Motorola, Kenwood, ICOM shall be considered.

## पढ़ा जावे /READ AS-

Specification of Digital Non display Handheld Radio:-

Frequency Range:- VHF band of 136 – 174 MHz  
Channel Capacity:- 32 minimum  
Power Supply:- 7.5 V (Nominal) ± 20%  
Battery Type:- Rechargeable,  
Capacity: minimum 2200mAH  
Chemistry: Li-ion  
Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power:- Analog: 14.5 hrs / Digital:- 18.5 hrs  
Channel Spacing:- 12.5/25kHz  
Frequency Stability (-30°C, +60°C, +25°C Ref):- ± .5 ppm  
Analog Sensitivity:- (12dB SINAD) 0.3uV (0.22uV typical)  
Digital Sensitivity: - 0.25 uV (0.19 uV typical)  
Intermodulation (TIA603D):- -70 dB  
Adjacent Channel Selectivity (TIA603D):- 45dB @ 12.5 kHz / 70dB @ 25 kHz  
Spurious Rejection (TIA603D):- -70 dB  
Rated Audio Output:- 0.5W  
Audio Distortion @ Rated Audio:- 5% (3% typical)  
Hum and Noise:- -40dB @ 12.5 kHz / -45dB @ 25 kHz  
Audio Response:- TIA603D  
Conducted Spurious Emission (TIA603D) :- -57dBm  
RF Power Output: - 1W(Low Power) / 5W (high Power)  
Audio Distortion:- less than 3%  
Modulation Limiting:- ± 2.5kHz @ 12.5 kHz / ± 4.0kHz @ 25 kHz  
FM Hum and Noise:- -40dB@ 12.5 kHz / -45dB@ 25 kHz  
Conducted/Radiated Emission:- -36 dBm < 1GHz / -30 dBm > 1GHz  
Adjacent Channel Power:- 60dB @ 12.5 kHz / 70dB @ 25 kHz<sup>3</sup>  
Digital Vocoder Type:- AMBE+2™  
Digital Protocol:- STA ETSI TS 102 361-1, -2, -3Y  
MIL Standard:- 810C, 810D, 810E, 810F, 810G  
Operating Temperature -30°C / +60°C for Radio, -10°C / +60°C for Battery  
Thermal Shock Per MIL-STD  
Humidity Per MIL-STD  
Dust and Water Intrusion IEC60529 - IP54  
Packaging Test MIL-STD 810D and E  
Radio should have following features :-

- Digital Mobile Radio (DMR) Standards Compliant
- Narrowbanding Compliant
- Restricted Access To System
- Lone Worker
- Priority / Non Priority Scan
- Remote Monitor
- Radio inhibit (decode only)
- Transmit Radio ID
- MDC / Quick Call II Signaling Systems
- Voice Announcement for Channel number, Battery Capacity, High/Low Power

Make :- Motorola, Kenwood, ICOM or equivalent.

2) Page No./Clause No.

(Reference: Webcast Tender Document) --

Bid Document  
 Technical Specification  
 2. Wireless Base Unit VHF Control/Base Station -  
 Page - 09

के स्थान /FOR (Existing Entries) -

VHF Control /Base Station:

- 1) Digital TDMAVHF Base Radio operating in 136-174MHz frequency Band having 160 channel capacity, 25 W RF power with Fist Microphone, Mounting Bracket, Battery Cable with Fuse
- 2) 12V, 10Amp Power Supply with Battery Revert
- 3) 30 meters RG213 RF Cable.
- 4) 0 dB GP VHF Antenna
- 5) Installation & Commissioning of Complete Control /Base station on Existing Mast.

Specification of Digital Control /Base Station

GENERAL SPECIFICATIONS:-

- Frequency Range: VHF band of 136 – 174 MHz
- Channel Capacity: 160 minimum
- Power Supply: 12 V DC (Nominal) ± 10%
- Radio Dimensions (H x W x D): 44 x 169 x 134 mm
- Weight: 1.3Kg
- Current Drain
- Standby: 0.81 A max
- Rx @ Rated: 2 A max
- Transmit: 1-25 W: 11.0 A max

RECEIVER:-

- Channel Spacing: 12.5/25kHz
- Frequency Stability (-30°C, +60°C, +25°C Ref): ± .5 ppm
- Analog Sensitivity: (12dB SINAD) 0.3uV (0.22uV typical)
- Digital Sensitivity (5% BER): 0.25 uV (0.19 uV typical)

- Intermodulation (TIA603D): 75 dB
- Adjacent Channel Selectivity (TIA603D): 50dB @ 12.5 kHz / 75dB @ 25 kHz
- Spurious Rejection (TIA603D): 75 dB
- Rated Audio Output: 4W Internal
- Audio Distortion @ Rated Audio: 3% typical
- Hum and Noise: -40dB @ 12.5 kHz / -45dB @ 25 kHz
- Audio Response: TIA603D
- Conducted Spurious Emission (TIA603D) : -57dBm

TRANSMITTER:-

- RF Power Output: 1-25 W
- Audio Distortion: 3%
- Modulation Limiting: ± 2.5kHz @ 12.5 kHz / ± 5.0kHz @ 25 kHz
- FM Hum and Noise: -40dB @ 12.5 kHz / -45dB @ 25 kHz
- Conducted/Radiated Emission: -36 dBm < 1GHz / -30 dBm > 1GHz
- Adjacent Channel Power: 60dB @ 12.5 kHz / 70dB @ 25 kHz<sup>3</sup>

FM Modulation 12.5 kHz: 11K0F3E

Digital Protocol: STA ETSI TS 102 361-1, -2, -3Y

ENVIRONMENTAL SPECIFICATIONS:-

MIL Standard: 810C, 810D, 810E, 810F, 810G

Operating Temperature -30°C / +60°C

Thermal Shock Per MIL-STD

Humidity Per MIL-STD

ESD IEC 61000-4-2 Level 3

Dust and Water Intrusion IP54

Packaging Test Per MIL-STD

Radio should have following features :

Analog / Digital Voice Communications

Dual Capacity Direct Mode

Canned Text Message

Digital Mobile Radio (DMR) Standards Compliant

Alphanumeric Display

Narrowbanding Compliant

Single Extended Range Direct Mode

Restricted Access To System

Radio inhibit (decode only)

Transmit Radio ID

Priority / Non Priority Scan

Remote Monitor

Lone Worker

MDC / Quick Call II / Digital Emergency Signaling Systems

Voice Announcement for Channel number, High/Low Power

पढा जावे /READ AS-

VHF Control /Base Station:

- 1) Digital TDMAVHF Base Radio operating in 136-174MHz frequency Band having 160 channel capacity, 25 W RF power with Fist Microphone, Mounting Bracket, Battery Cable with Fuse
- 2) 12V, 10Amp Power Supply with Battery Revert
- 3) 30 meters RG213 RF Cable.
- 4) 0 dB GP VHF Antenna
- 5) Installation & Commissioning of Complete Control /Base station on Existing Mast.

Specification of Digital Control /Base Station

GENERAL SPECIFICATIONS:-

Frequency Range: VHF band of 136 – 174 MHz

Channel Capacity: 160 minimum

Power Supply: 12 V DC (Nominal) ± 10%

Radio Dimensions (H x W x D): 44 x 169 x 134 mm

Weight: 1.3Kg

Current Drain

Standby: 0.81 A max

Rx @ Rated: 2 A max

Transmit: 1-25 W: 11.0 A max

RECEIVER:-

Channel Spacing: 12.5/25kHz

Frequency Stability (-30°C, +60°C, +25°C Ref): ± .5 ppm

Analog Sensitivity: (12dB SINAD) 0.3uV (0.22uV typical)

Digital Sensitivity (5% BER): 0.25 uV (0.19 uV typical)

Intermodulation (TIA603D): 75 dB

Adjacent Channel Selectivity (TIA603D): 50dB @ 12.5 kHz / 75dB @ 25 kHz

Spurious Rejection (TIA603D): 75 dB

Rated Audio Output: 4W Internal

Audio Distortion @ Rated Audio: 3% typical

Hum and Noise: -40dB @ 12.5 kHz / -45dB @ 25 kHz

Audio Response: TIA603D

Conducted Spurious Emission (TIA603D) : -57dBm

RF Power Output: 1-25 W  
Audio Distortion: 3%  
Modulation Limiting:  $\pm 2.5$  kHz @ 12.5 kHz /  $\pm 5.0$  kHz @ 25 kHz  
FM Hum and Noise: -40dB @ 12.5 kHz / -45dB @ 25 kHz  
Conducted/Radiated Emission: -36 dBm < 1GHz / -30 dBm > 1GHz  
Adjacent Channel Power: 60dB @ 12.5 kHz / 70dB @ 25 kHz<sup>3</sup>

FM Modulation 12.5 kHz: 11K0F3E  
25 kHz: 16K0F3E  
4FSK Digital Modulation 12.5 kHz Data: 7K60F1D and 7K60FXD  
Digital Vocoder Type: AMBE+2™  
Digital Protocol: STA ETSI TS 102 361-1, -2, -3Y

ENVIRONMENTAL SPECIFICATIONS:-

MIL Standard: 810C, 810D, 810E, 810F, 810G

Operating Temperature -30°C / +60°C

Thermal Shock Per MIL-STD

Humidity Per MIL-STD

Dust and Water Intrusion IP54

Packaging Test Per MIL-STD

Radio should have following features :

Analog / Digital Voice Communications

Dual Capacity Direct Mode

Digital Mobile Radio (DMR) Standards Compliant

Alphanumeric Display

Narrowbanding Compliant

Restricted Access To System

Radio inhibit (decode only)

Transmit Radio ID

Priority / Non Priority Scan

Remote Monitor

Lone Worker

MDC / Quick Call II / Digital Emergency Signaling Systems

Voice Announcement for Channel number, High/Low Power

निविदा सूचना की अन्य सभी शर्तें यथावत रहेंगी ।

All other terms & condition of tender enquiry shall remain unchanged

  
प्रबंधक (सामग्री)/ Dy. Manager (Material)

हेतु मुख्य महाप्रबंधक/ For- Chief General Manager