

## **Hand Held Through Wall Imaging Radar (HH-TWIR)**

Electronics and Radar Development Establishment (LRDE), a premier lab under DRDO has developed state-of-art Radar systems and associated Technologies. LRDE is seeking Expression of Interest (Eoi) from prospective bidders/recipient for Transfer of Technology in the area of Radars.

Presently, LRDE is ready for ToT for the “**Hand Held Through Wall Imaging Radar (HH-TWIR)**”. Prospective bidders for Eoi are advised to refer the Transfer of Technology link on the DRDO website, [www.drdo.gov.in](http://www.drdo.gov.in) for further details/description of the system.

The terms and conditions to be complied by the bidders for receipt of technology are available in the document, “Guidelines for Transfer of Technology” published in the Transfer of Technology link on the website, [www.drdo.gov.in](http://www.drdo.gov.in).

### **1. Description of Technology:**

The Handheld Through Wall Imaging Radar (HH-TWIR) is an important sensor used for detection and location of static and moving targets, especially human beings behind walls. The radar can image in real time the scenario behind wall, identify the number of people and their location behind walls, study their activity patterns and thus helps in identifying the hostage scenario behind the wall. The different types of walls include concrete, reinforced concrete, brick, cement, wood, stone etc. Imaging the scenario behind wall, tracking the path of the moving targets and presenting fine Doppler information like heart beat and breathing of a person are the important functions of this radar. Low power consumption, light weight, ease of operation are the key features of the system.

The Hand held TWIR is a light weight, portable, battery operated system configured to detect targets through various types of walls in real time. The system is extremely useful to get a quick 2D view of the scenario behind the wall. The HMI comprises of simple to use push button switches for On/Off, range and mode selection which can be operated by the thumb of the operator while holding the radar in his hands.

The display is a 6” LCD display which gives the 2D top view of the room scenario and range vs. time history of the targets within the room in the tracker mode of operation. In the Doppler mode of operation, stationary living and non-moving human beings are detected through their heart beat and breathing Doppler.



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Apart from this, there are signal and battery level indicators on the display. The display can also be viewed from a remote location using a wireless and/or wired display. Remote control and display through a wired link is an additional feature of the system.

## **2. Application Areas:**

The Radar has a huge application during hostage and rescue operations where people are held captive inside closed rooms or are trapped or lying unconscious below rubble.

***Interested Industries may submit their company profile, financial & technical Capabilities etc. as per the EOI terms (Refer Appendix-G) in 'Guidelines for ToT' document) to Director, LRDE, Bengaluru and copy to Director D<sup>2</sup>TM on the following addresses within 45 days of this advertisement.***

<b>Director, LRDE</b> DRDO, Min. of Defence, C V Raman Nagar Bengaluru-560093 Contact No : 080 - 25025415 080 - 25025518 (ToT cell) Fax : 080 - 25242916	<b>Director, DIITM</b> Room No 446 DRDO Bhawan DRDO HQrs Ministry of Defence RajajiMarg New Delhi – 110011 Contact No : (011) 23016216 / 23007446 Fax : (011) 23793008
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