



DESCRIPTION

SWL-M2 is a medium range phased array radar which is employed for positioning the launch point of hostile projectiles in three different classes of mortar, artillery, and rockets. It can also be used for correcting the impact point of friendly firing units. This radar is capable of scanning 90° of azimuth sector quickly. It is also capable of declaring the launch point position of 6 projectiles simultaneously in a short period of time. It is equipped by advanced ECCM capability and is able to perform its mission in environments full of different types of jammers. Since all of different radar sub-systems are installed on one truck, the radar is completely tactical and can be set up by two operators in a short time.

FEATURES

- Ability to confront EW.
- Locates mortars, artillery, and rocket launchers.
- Adjusts friendly fire.
- Predicts impact of hostile projectiles.
- Permanent storage for 99 targets.
- Remote control and remote data display capability.
- Possibility of selecting fixed or staggered PRF.
- Wide band transmitter and receiver.
- Possibility of operator controlled frequency change over the entire frequency band.
- Carrier frequency hopping capability over the entire transmitter bandwidth.
- Capability of turning STC on or off by user.
- Possibility of combining and displaying different videos (Normal and MTI)
- SLC capability and separate receiver for JATS



TECHNICAL FEATURES

Frequency	band S Band
Peak power	50 kW
RF band width	400 MHz
Antenna type	Micro-strip patch
Working mode	Hostile Mode: For Launch point estimation of hostile mortar, artillery and rocket - Friend Mode: For Impact point estimation of friendly mortar, artillery and rocket and guidance of counter fire
Detection Range	Mortar(with at least 120mm caliber) @ 12Km Mortar(with at least 181mm caliber) @ 8Km Artillery(with at least 122mm caliber) @ 12Km Rocket(with at least 122mm caliber) @ 25Km
Radar Distance to Battlefield	5km
Minimum range for projectiles detection Rmin	< 3km
Coverage angle in azimuth	90°
Coverage angle in elevation	40°
Range accuracy for projectiles	75m
Angle accuracy for projectiles	0.5°
Weapon Location Error	Max(0.6%Range , 100m)
Simultaneous Weapon Locating	6
system set-up time	≤ 15 Min
System Time to be ready for movement	≤ 10 Min
Working staff	2 operators,
MTBF	200 hrs
MTTR	30 min
Power	3 phase, 380v/50Hz