

# VELOCITY RADAR

## THE SL SERIES



Weibel's Doppler velocity radars are designed for precise velocity measurements of free-flying objects such as projectiles, artillery rounds, and rockets. The radars are capable of operating under confined indoor as well as long range environments and providing velocity and other ballistic data.

## VELOCITY RADARS – THE SL SERIES

The network-ready SL family of fixed head Doppler radar systems is easily portable and based on state of the art radar technologies. All electronic components are integrated in the antenna/processor unit. The radars connect directly to your TCP/IP network and can be accessed and controlled from any standard PC on the network, running WinDopp software.

### TECHNOLOGY IN FOCUS

The system measures on all types of ammunition and calibers, such as:

- Projectiles
- Artillery; conventional and base bleed
- Mortars
- Tracers
- Anti-tank rounds
- APFSDS
- Rockets

The system is designed to measure velocities from 10 to 10.000 m/s with overall system accuracy typically better than +/- 0.05%. The Weibel Doppler radar systems incorporate a unique self-calibrating technology. In this way, the system does not need any calibration during its entire life cycle, as it calibrates automatically with the speed of light.

## ROBUST RADAR SYSTEM

The fixed head Doppler radar systems are designed to operate in the field under harsh conditions. The rugged mechanical and electronic system design ensures high reliability and robust resistance to blast and vibrations from firing weapons.













### NEW FEATURES

- Easy access to remote unmanned radars
- Easy supervision of radar operators in the field
- Remote assistance over the internet
- Multiple radars and WinDopp PCs in the same network for maximum flexibility
- The internal sample memory ensures safe operation on networks with low bandwidth

### ANALYTICAL BENEFITS

With Weibel's velocity radars, you get detailed measurements. The analytical measurement functions allow highly advanced measurements of for example ricochets, penetration and in-bore measurements.

By using the Weibel WinDopp software, you can extract much more than just velocity information. The software and radars will provide you with full velocity development over the time of flight, and you can observe and measure for instance projectile spin, micro-movements, yaw, tumbling, and sudden velocity changes throughout the trajectory.

RADAR	WEAPON	TYPICAL RANGE
SL-520PE		 120 m
SL-525PE		 250 m
SL-528PE		 400 m
SL-2028PE		 800 m
SL-15028PE		 1,100 m
SL-30033PE		 2,000 m

Corresponds to a 5.56mm NATO standard (-47 dB target), target in the middle of the beam.

Values are approximates and not true RCS. Real-life tracking depends on weather conditions and attenuations. Contact Weibel at [support@weibel.dk](mailto:support@weibel.dk) for your requirements.