



MOVING ARMOR TARGET (MAT) / DP63

Meggitt Training Systems' Moving Armor Target (MAT) provides the most cost effective target operation with the fewest sustainment requirements. Designed for maximum capability and high temperature operations to satisfy stringent customer training requirements, the MAT requires minimal footprint and infrastructure. The MAT rides on elevated track, is equipped with a heavy flank Stationary Armor Target (SAT) and can display armor/vehicle silhouettes up to 300 lbs. (156kg) and up to 23ft. (700cm) length x 7.5ft. (230cm) height including all standard silhouettes per US Army TC25-8. The SAT allows the use of numerous silhouettes from US Army to NATO specifications (up to 300 lbs).

Responding to pre-programmed or direct operator commands, the MAT transports in either direction with an exposed or concealed target. Available options include evasive action (stop and go, and stop and change direction mid-track), changing speed (up or down), and expose or conceal target during transport. The MAT target can conceal upon command, upon kill, at the end of a timed exposure, or at the end of transport. Users may also select the number of hits to kill, with three kill reactions including hit-hold, hit-fall and hit-bob.

Meggitt's MAT provides quick action training, displaying up to a flank silhouette target in less than 12 seconds and concealing in less than 8 seconds. The contact hit sensors offer 15 levels of sensitivity, remotely selectable from the Range Control System (RCS). The MAT communicates a wide variety of status updates to the RCS indicating parked/docked, moving/transport, speed, carrier at end of course, target silhouette exposed/concealed, thermal power on/off, and carrier crossed emergency limit. The MAT provides hi op tempo operation and can complete 7 runs per hour, up to 100 runs in a 24 hour day, plus 50 runs during night training without needing to replace batteries or conduct maintenance.



MAT Specifications (Carrier and Bunker Box)

Specification	Value
Communication	ENET or HW MUX to Bunker Box, and Wi-Fi, 900 MHz or 2.4 GHz from Bunker Box to the MAT. Also available as 2400 Baud VHF/UHF directly to MAT
Power	36VDC on board, 120VAC/230VAC 50/60Hz regeneration; existing buss bar or a docking station to support thermal targets
Power Consumption	4kW in motion (activation), 20w max in stand-by
Dimensions	305 cm L x 122 cm W x 56 cm H ; US Army standard 7.3 m W x 2.3 m H
Weight	680 kg not including track, docking station and bunker interface; supports up to 300 lbs
Lift Speed	< 12.0 sec in winds to 35 mph (56 kph)
Target Handling	Expose/conceal max 300 lbs (156 kg) full flank silhouette, 700 cm (L) x 230 cm (H) with target base at 170 cm above road bed
Track	30 cm elevated, 6.3 cm galvanized square tube available in 366 cm lengths
Track Gauge	100 cm (center to center) diamond configuration
Self-Test	Standard power on self-test
Watertight	Yes
Wind	35 mph (56 kph) safe operation
Temperature	-20°F (-29°C) to +140°F (+60°C) operation
Speed	Up to 32 kph

Examples of Fielded MATs

