FORTEM TECHNOLOGIES

COUNTER-DRONE RADAR

TrueView® R40

AESA radar performance at the lowest SWaP-C in its class.

Scan more of the sky for drone threats — at less cost, less power, and less than half the weight.*



7.7 kg / 17 lb
WEIGHT*

220 W
POWER · 23–36 VDC

130° × 130°
FIELD OF VIEW · AZ × EL

0.15 m/s
MIN. DETECTABLE SPEED

100
TRACKS PER RADAR PANEL

5.5 TFLOP
ONBOARD GPU + FPGA

TRACKING RANGE

Small multi-rotor drone DJI Phantom 4 class	**4 km**
Fixed-wing drone 3 m wingspan	**5.2 km**
Large multi-rotor drone DJI Matrice 600 class	**5.5 km**
Cessna-size aircraft Manned aircraft	**13 km**
Instrumented range	**32 km**

AESA + STAP
Electronically steered beam with space-time adaptive processing to reject jamming, interference and clutter.

FMCW WAVEFORM
Virtually no minimum range. Emissions spread across frequency, time and space are hard to detect and locate.

AI AT THE EDGE
Onboard classification with operator-tunable speed, altitude and RCS thresholds. Upgrades by software.

OPEN INTEGRATION
Feeds SkyDome® or third-party C2 via JSON, Cursor on Target, ASTERIX and SAPIENT.

* Weight vs. the most widely fielded radar in its class; TrueView R40 externally calibrated. Standard and self-calibrating versions: see reverse.

FORTEM TECHNOLOGIES

TrueView® R40

PRODUCT SPECIFICATIONS

PERFORMANCE

Tracking range	4.0 km · DJI Phantom 4-class multi-rotor 5.2 km · Fixed-wing drone, 3 m wingspan 5.5 km · DJI Matrice 600-class multi-rotor 13.0 km · Cessna-class manned aircraft
Instrumented range	1–32 km, configurable
Field of view	Configurable from 20° × 20° to 130° × 130° (azimuth × elevation)
Angular accuracy	±0.7° azimuth, ±0.7° elevation RMS or less
Min. radial velocity	0.15 m/s or less, configurable
Track update rate	64 ms to 6.1 s, configurable
Simultaneous tracks	Up to 100 per radar panel

RADAR

Architecture	AESA · FMCW · 16 digital receive channels · digital beamforming · STAP
Frequency	Ku-band, 15.4–16.6 GHz (can be restricted per local regulations)
Max. bandwidth	89 MHz at 2 m range resolution
Transmit power	16–22 W (42–43.4 dBm)
Tx antenna gain	15 dBi
Tx EIRP	506.0–695.7 W (57.0–58.4 dBm)

PROCESSING & INTEGRATION

Onboard processing	5.5 TFLOP GPU + FPGA; no external computer required
Classification	Onboard AI using micro-Doppler plus detection- and track-level features. Tunable speed, altitude and RCS thresholds; upgrades by software.
Data formats	JSON · Cursor on Target · ASTERIX · SAPIENT
Integration	SkyDome® detection layer; cues EO/IR cameras and DroneHunter®; feeds third-party C2

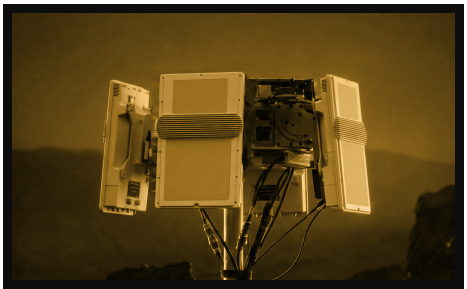
POWER & ENVIRONMENT

Input power	23–36 VDC, 220 W draw
Operating temp.	–40 °C to +65 °C (–40 °F to +149 °F)
Compliance	RoHS · MIL-STD-810 · CE

CONFIGURATIONS

	WEIGHT	DIMENSIONS (W × H × D)
Externally calibrated	**7.7 kg** 17.0 lb	285.75 × 435.86 × 72.19 mm 11.25 × 17.16 × 2.84 in
Standard	**8.4 kg** 18.5 lb	285.75 × 468.12 × 72.19 mm 11.25 × 18.43 × 2.84 in
Self-calibrating	**9.25 kg** 20.4 lb	393.95 × 468.12 × 143.30 mm 15.51 × 18.43 × 5.64 in

Weights ±3%. Self-calibrating width with arms extended: 1109.27 mm (43.67 in); determines its own position and orientation on setup.



USE CASE 01

Fixed site

Persistent coverage from masts and towers. Four R40s on Fortem's precision mount give compact 360° coverage, and STAP keeps tracks clean in cluttered urban sites.



USE CASE 02

Portable

Rides in a vehicle, sets up on a tripod in minutes. The self-calibrating version works out its own position and orientation on setup.



USE CASE 03

On the move

Low weight and power on platforms where every pound counts, with tracking right up to the vehicle.

© 2026 Fortem Technologies · 50-0001-000 · Specifications subject to change.