



## Turkey's Electromagnetic Anti-Drone Weapon

**OE Watch Commentary:** Turkey's defense industry continues to unveil new products to improve Turkey's warfighting capabilities, particularly unmanned aerial vehicles (UAVs). While some Turkish defense manufacturers have focused their efforts on developing and improving the capabilities of UAVs, others have focused on disrupting UAV attacks. Most recently, Turkey's electromagnetic anti-drone systems producer Harp Arge (R&D) has produced an anti-UAV gun to disrupt UAV attacks. The accompanying articles provide insights into Turkey's first anti-drone gun.

According to the first article from the manufacturer Harp Arge, the ES-60 Electromagnetic Anti-Drone Gun weighs 5.5-pounds and its indigenous antenna technology allows for its reduced size and weight. The weapon has the capability to disrupt drone communication via control and command centers by causing a malfunction using high-speed electromagnetic interference. It can combat UAVs within nearly a two mile-range. As the article states, this Anti-Drone Gun has capability to function silently in three seconds to disrupt drone systems "without negative consequences to human health, public safety and the environment." This gun "provides the most effective solution to combatting drones." With its foldable and adjustable butt, it is easy to operate in challenging field environment.

The second article states that over 70 percent of the Anti-Drone Gun was produced by indigenous capabilities. The manufacturer notes that the firm has been working on the design and a prototype of an anti-drone weapon for a long time. Finally, the investment of Ekba Holding enabled its production and now, the firm "will start mass production of the ES-60 after establishing its assembly line." **End OE Watch Commentary (Gündüz)**



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Source: N13s013 via Wikimedia, [https://commons.wikimedia.org/wiki/File:TAI\\_ANKA-S.jpg](https://commons.wikimedia.org/wiki/File:TAI_ANKA-S.jpg), CC-BY-SA-4.0

***“Harp ES-60 Electromagnetic Anti-Drone Gun offers mobile solutions to field troops with its 2.5 kg weight and 3 km effective range...”***

**Source:** “ES-60 Elektromanyetik Drone Savar Silahı (ES-60 Electromagnetic Anti-Drone Gun)” [harparge.com](http://www.harparge.com), Undated. <http://www.harparge.com/drone-savar>

*Drones have been widely used recently due to their high availability and low costs...*

*Especially in rallies, concerts, stadiums and similar public events, stopping drones with firearms comes with serious drawbacks. The Anti-Drone gun applies high-speed electronic warfare technology to the drone.*

*Drones exposed to electromagnetic attack are disabled by losing connection with command and control. The ES-60 Electromagnetic Anti-Drone Gun offers an effective solution in the fight against the drones since it does not harm human health and environmental safety and produces a silent and fast result.*

*Harp ES-60 Electromagnetic Anti-Drone Gun offers mobile solutions to field troops with its 2.5 kg weight and 3 km effective range. With its local and national special antenna design, the ES-60 Electromagnetic Anti-Drone Gun provides operational convenience to the user with its ergonomic structure. Our guns are 100% compatible with your own binoculars and gun apparatus with the 22mm picatiny rail system. Our drone gun, which is presented with a foldable and adjustable butt stock option, is designed for difficult field conditions.*

*Our ES-60 Electromagnetic Drone repellent electromagnetic weapon systems pacify drones with its super focused antennas and high power output. With fast scanning, continuous mixing is applied to drone command and Gps / Glonass frequencies. Using the anti-drone weapon for 3 seconds is sufficient to blind the drone systems.*

**Source:** Göksel Yıldırım, “Milli drone savar 3 kilometreden drone uçurmayacak (National drone repellent will not let drones fly within 3 kilometers),” *Anadolu Ajansı*, 15 March 2020. <https://www.aa.com.tr/tr/bilim-teknoloji/milli-drone-savar-3-kilometreden-drone-ucurmayacak/1766630>

*More than 70 percent of its content is locally sourced and the anti-drone gun was on display for security personnel...*

*Harp Arge said they had been working on the design and prototyping of an anti-drone gun for a long time but that its production was made possible only after it was acquired by Ekba Holding recently. The company has now been included in the Cemd Defense Corporation group that operates as part of the Ekba Holding and will start mass production of the ES-60 after establishing its assembly line.*