

## MULTIPLE MAGNETOELECTRIC SYSTEMS (MMS)



Double motor for surveillance system

### Areas of Application

MMS is designed to orient moving elements of systems for surveillance, target location, and guidance used in military and space equipment

### Specification

The triple motor system:

outer diameter, mm	$\leq 70$
stabilized rotor speed, rpm	$\leq 10000$
Rotor slope relative to transverse axes, deg	$\leq \pm 30$

The double motor system:

outer diameter, mm	$\leq 150$
rotor angular range, deg	$\leq \pm 60$
slope of torque curve, Nm/A	$\leq 1$

### Advantages

The MMS can be a substitute for combination of two or three conventional electric motors. Having the same dimensions and energy consumption the MMS possesses a 3–5 times higher electromagnetic moment and 7–20 times higher speed as compared with the conventional combination.

These advantages are achieved due to the full employment of device volume for placing the electromagnetic core, a decrease in inertia moments of the intermediate moving elements, and an increase in electromagnetic torque

### Stage of Development. Suggestions for Commercialization

IRL7, TRL8

Customized design, manufacture, delivery, warranty service, and staff training, upon request

### IPR Protection

IPR3

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