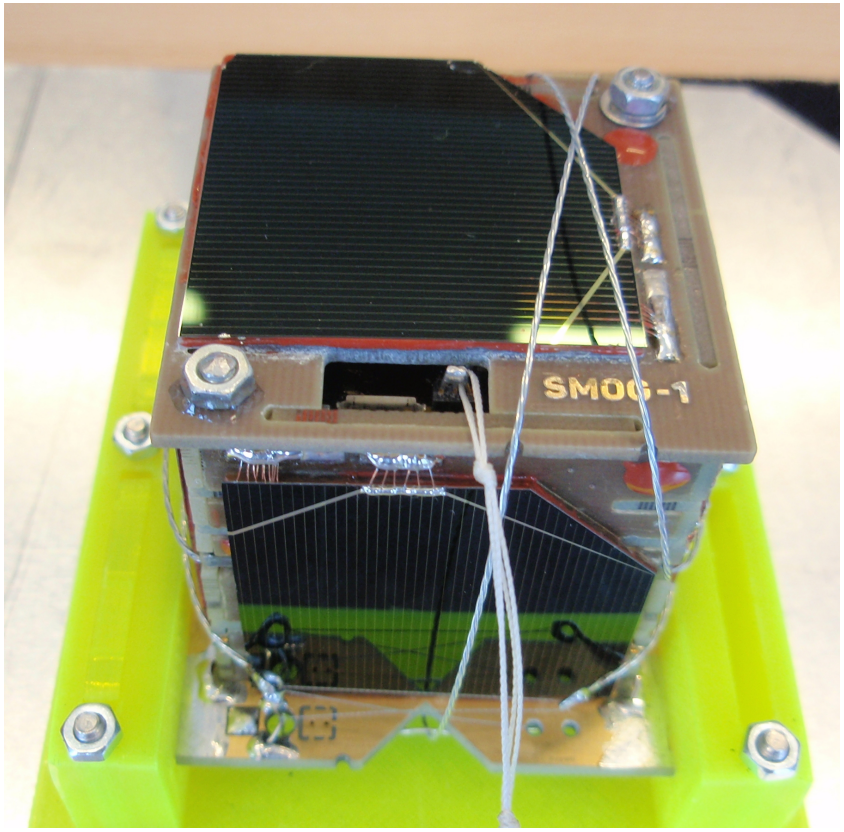
Masat-1 - the first Hungarian student satellite

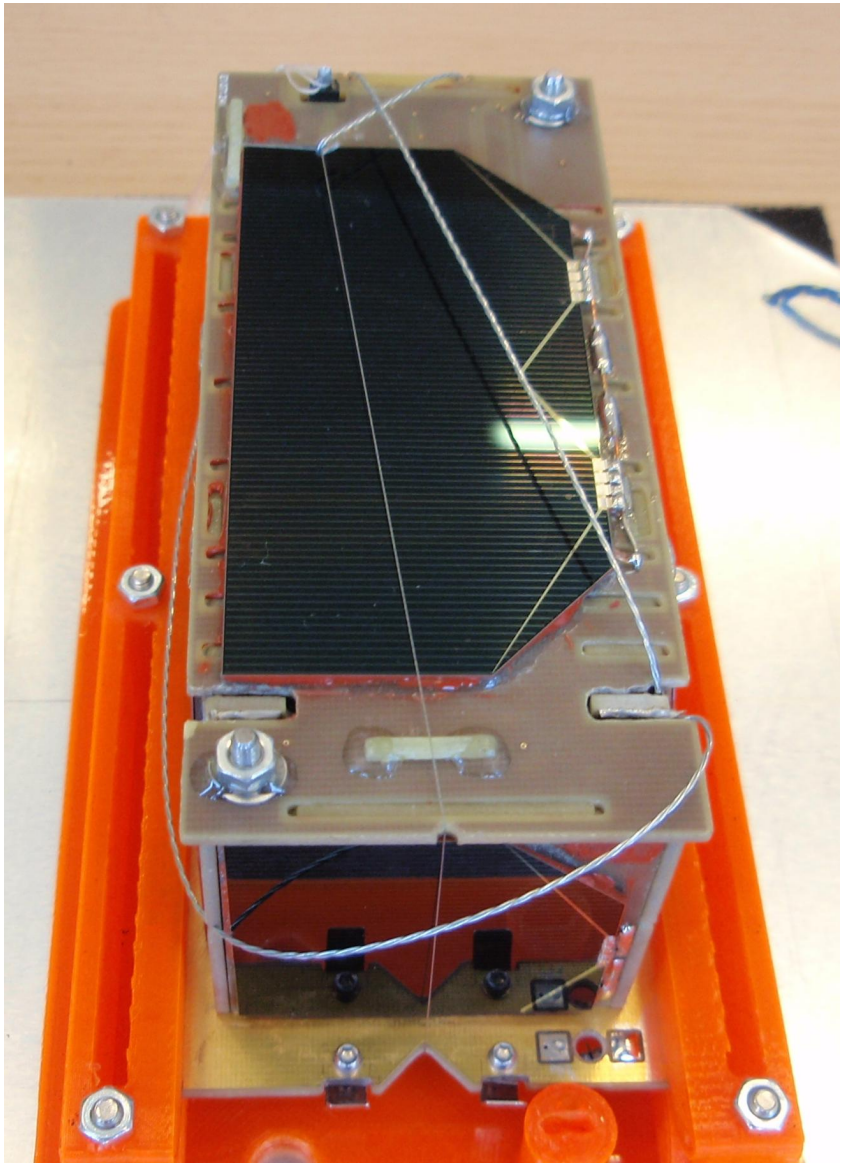
- 10x10x10cm 1U cubesat
- 998.5 g mass
- 1.2 W avg. DC in
- 437.345 MHz UHF1
- HA5MASAT
- 2007-2012 development
- 1062 days operation
- Vega-1 (ESA) rocket
- technology demonstration
- 1450-350 km LEO 69 deg inclination

SMOG-P - the second Hungarian student satellite



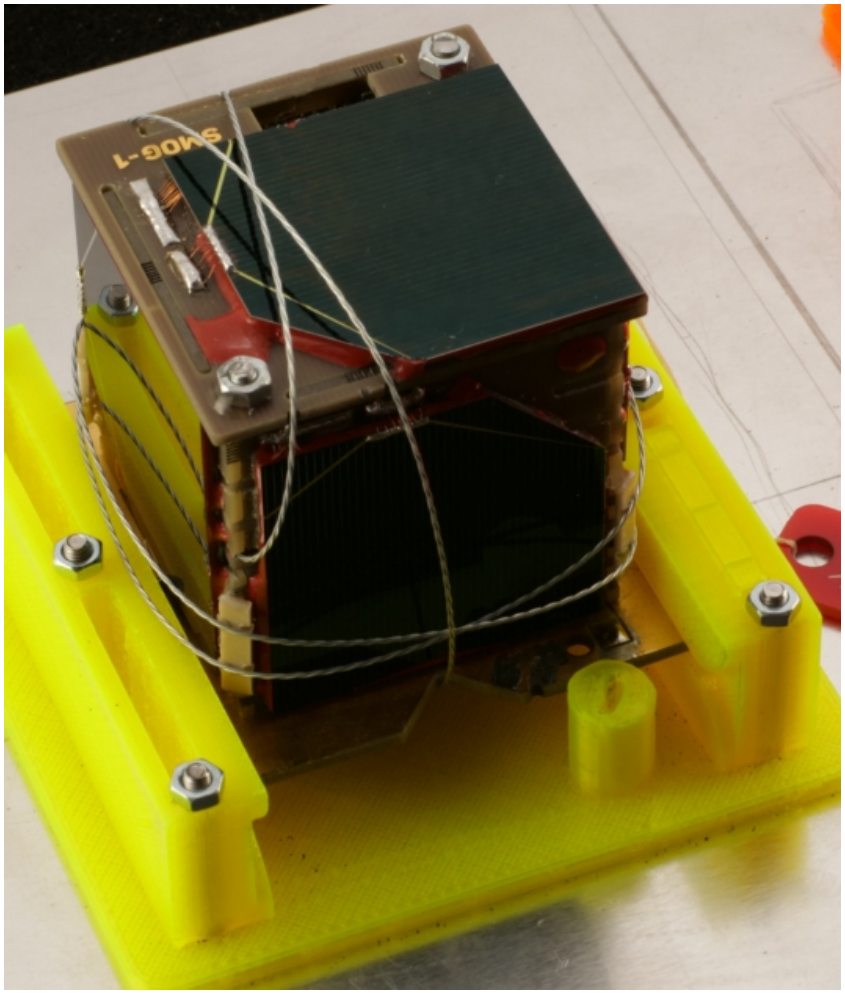
- 5x5x5cm 1-PocketQube
- 183 g mass
- 400 mW avg. DC in
- 437.150 MHz UHF
- HA4C
- 2015-2019 development
- 298 days operation
- Electron rocket
- electromagnetic smog measurement
- 365 km circ. LEO 93 deg incl.

ATL-1 - the third Hungarian student satellite



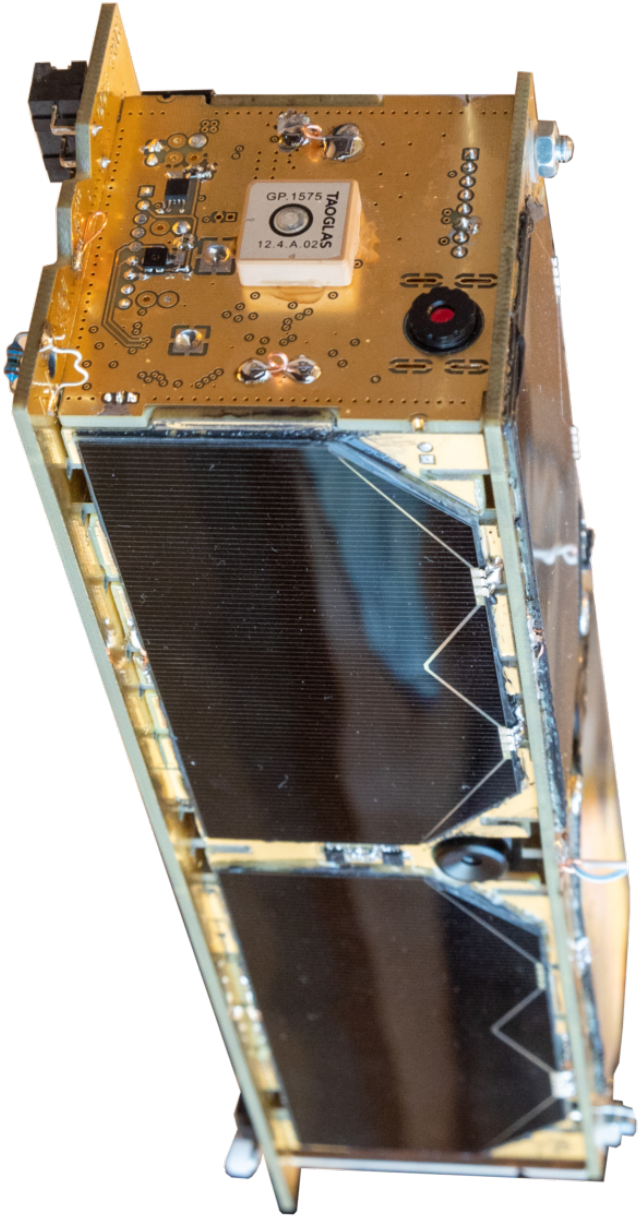
- 5x5x10cm 2-PocketQube
- 336 g mass
- 650 mW avg. DC in
- 437.175 MHz UHF
- HA1ATL
- 2016-2019 development
- 312 days operation
- Electron rocket
- thermal insulation test
- 365 km circ. LEO 93 deg incl.

SMOG-1 - the fourth Hungarian student satellite



- 5x5x5cm 1-PocketQube
- 185 g mass
- 400 mW avg. DC in
- 437.345 MHz UHF
- HA5BME
- 2015-2022 development
- start 2021-03-22, operating
- Soyuz-2 rocket
- electromagnetic smog measurement
- 565 km circ. LEO 97 deg incl.

MRC-100 - the fifth Hungarian student satellite



- 5x5x15cm 3-PocketQube
- 568 g mass
- 800 mW avg. DC in
- 436.720 MHz UHF
- 2267.5 MHz S-band
- HA100MRC
- 2021-2023 development
- start 2023-06-08
- Falcon-9 rocket
- 14 scientific payloads
- 600 km sun-sync LEO

Automated & remote controlled Earth station

- 4.5 m par. dish
- 140-2400MHz
- 400W RF TC
- HW radio TM
- SDR TM

- 3 m par. dish
- 0.4-18GHz
- 1.7GHz meteo
- 2.2GHz S-band
- 160MHz IQBW

- TeleCmd TX
- TeleMetry RX
- automated
- remote ctrld
- solar powered