

Proton-K/DM-2

Part of Proton Family

This improved four stage version uses the Block DM-2 / 11S861 fourth stage, which has its own guidance unit. This reduces payload but does not require the spacecraft's guidance system to provide steering commands to booster. Replaced the original Block DM / 11S86 version from 1982 to 1995. Used for launch of Glonass navigation satellites into medium earth orbit; and launch of Luch, Ekran-M, Potok, Raduga, Gorizont, Raduga-1, Elektro, and Gals communications satellites into geosynchronous orbit. Commercial version with Saab payload adapter-separation system for Western payloads was dubbed 'Block DM1'.

AKA: 8K82K / 11S861;D-1e;Proton 8K82K / Block DM-2;SL-12;UR-500K. *Status:* Active. *First Launch:* 1982-10-12. *Last Launch:* 2012-03-30. *Number:* 110 . *Payload:* 1,880 kg (4,140 lb). *Thrust:* 8,847.00 kN (1,988,884 lbf). *Gross mass:* 711,110 kg (1,567,720 lb). *Height:* 59.00 m (193.00 ft). *Diameter:* 4.15 m (13.61 ft). *Span:* 7.40 m (24.20 ft). *Apogee:* 40,000 km (24,000 mi).

Payload: 1,880 kg (4,140 lb) to a GEO. *Launch Price \$:* 70.000 million in 1994 dollars.

More at: [Proton-K/DM-2](#).

Family: [orbital launch vehicle](#). *Country:* [Russia](#). *Engines:* [RD-0210](#), [RD-0212](#), [RD-58M](#), [RD-253-11D48](#). *Spacecraft:* [Raduga](#), [Prognoz SPRN](#), [Gorizont](#), [Potok](#), [Glonass](#), [Tselina-2](#), [Luch](#), [AS 4000](#), [Ekran-M](#), [Etalon](#), [Raduga-1](#), [Gals](#), [Ekspress](#), [Elektro](#). *Projects:* [Tselina](#). *Launch Sites:* [Baikonur](#), [Baikonur LC81/23](#), [Baikonur LC81/24](#), [Baikonur LC200/40](#), [Baikonur LC200/39](#). *Stages:* [UR-200-2](#), [Proton K-1](#), [Proton K-2](#), [Proton 11S861](#). *Agency:* [Chelomei bureau](#), [Inmarsat](#).
