

Quick Facts

Spacecraft

Dimensions: 5.3 meters (17 feet) high; magnetometer boom extends 11 meters (36 feet) to one side

Weight: 2,223 kilograms (2½ tons, or 4,902 pounds), including 118 kilograms (260 pounds) of science instruments and 925 kilograms (2040 pounds) of propellant

Power: 570 watts (at launch) from radioisotope thermoelectric generators

Science instruments: Solid-state imaging camera, near-infrared mapping spectrometer, ultraviolet spectrometer, photopolarimeter radiometer, magnetometer, energetic particles detector, plasma investigation, plasma wave subsystem, dust detector, heavy ion counter

Atmospheric Probe

Size: 127 centimeters (50 inches) diameter, 91 centimeters (36 inches) high

Weight: 339 kilograms (750 pounds)

Science instruments: Atmospheric structure, neutral mass spectrometer, helium abundance, nephelometer, net flux radiometer, lightning/energetic particles, doppler wind experiment

Mission

Launch: Oct. 18, 1989 from Kennedy Space Center, Fla., on space shuttle Atlantis on mission STS-34

Primary mission: October 1989 to December 1997

Extended missions: Three, from 1997 to 2003

Venus flyby: Feb. 10, 1990, at altitude of 16,000 km (10,000 mi)

Earth flybys: Dec. 8, 1990, at altitude of 960 km (597 mi); Dec. 8, 1992 at altitude of 303 km (188 mi)

Asteroid Gaspra flyby: Oct. 29, 1991, at 1,601 km (1,000 mi)

Comet Shoemaker-Levy 9: Impacts of comet fragments into Jupiter observed while en route in July 1994

Asteroid Ida flyby: Aug. 28, 1993, at 2,400 km (1,400 mi)

Atmospheric probe release: July 12, 1995

Probe speed into Jupiter's atmosphere: 47.6 km per second (106,000 mi per hour)

Jupiter arrival and orbit insertion: Dec. 7, 1995

Probe atmospheric entry and relay: Dec. 7, 1995

Number of Jupiter orbits during entire mission: 34

Number of flybys of Jupiter moons: Io 7, Callisto 8, Ganymede 8, Europa 11, Amalthea 1

Total distance traveled from launch to final impact: 4,631,778,000 kilometers (approx. 2.8 billion miles)

Speed of spacecraft at time of impact: 48.2 kilometers per second (nearly 108,000 miles per hour)

Program

Cost: Total from start of planning through end of mission is \$1.39 billion. International contribution estimated at an additional \$110 million

Partners: More than 100 scientists from United States, Great Britain, Germany, France, Canada and Sweden carried out Galileo's experiments. NASA's Ames Research Center, Mountain View, Calif., responsible for atmosphere probe, built by Hughes Aircraft Company, El Segundo, Calif. Radioisotope thermoelectric generators designed and built by General Electric Co. for the U.S. Department of Energy

Approximate number of people who worked on some portion of the Galileo mission: 800