FACT SHEET

ATV Albert Einstein

General
ESA participating member states: 10
People working on ATV (ESA and industry): ±2000
Cost: 450 M€
Launch campaign duration: 6 months

ATV-4 cargo
Mission propulsion fuel: 2235 kg
International Space Station propulsion support: 2580 kg
Refuelling ISS tanks: 860 kg
Water (for Russian segment): 570 kg
Gas (one tank with oxygen, two tanks with air): 100 kg
Dry cargo: 2501 kg
Launcher performance (max): 20 235 kg
Total amount of propellant in spacecraft: 4356-6960 kg

Planned ATV-4 dates
Launch: 5 June 2013
Docking: 15 June 2013
Undocking: 11 October 2013
Reentry: 15 October 2013

Technical
Lines of software code: 1M
Maximum power generated by Solar Arrays: 4.5 KW
Length of cables in avionics bay on side of a 4.5 m cylinder: 36 km

ATV-4 records
• Most dry cargo launched in any European spacecraft (2501 kg)
• Most diverse cargo mix: 1400 different items
• Largest quantity of late cargo loaded 2 weeks before launch (620 kg)
• Heaviest spacecraft ever lifted by any Ariane rocket (20 235 kg)

ATV-series records
• Longest and highest number of boosts of the International Space Station
• Most complex flight software ever developed by ESA: 1M lines of code, 450000 in the FAS alone
• Most complex propulsion system ever designed and operated by ESA
• First automated rendezvous of a European spacecraft

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