**ISS Modules**

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| **Module** | **Assembly mission** | **Launch date** | **Launch system** | **Nation** | **Isolated View** |  |
| *Zarya*(lit. 'dawn')(FGB) | 1A/R | 20 November 1998 | Proton-K | Russia (Builder)USA (Financier) |  |  |
| The first component of the ISS to be launched, *Zarya* provided electrical power, storage, propulsion, and guidance during initial assembly. The module now serves as a storage compartment, both inside the pressurised section and in the externally mounted fuel tanks. |
| *Unity*(Node 1) | 2A | 4 December 1998 | Space Shuttle *Endeavour*, STS-88 | USA |  |  |
| The first node module, connecting the American section of the station to the Russian section (via PMA-1), and providing berthing locations for the Z1 truss, *Quest* airlock, *Destiny* laboratory and *Tranquillity* node. |
| *Zvezda*(lit. 'star')(Service Module) | 1R | 12 July 2000 | Proton-K | Russia |  |  |
| The station's service module, which provides the main living quarters for resident crews, environmental systems and attitude & orbit control. The module also provides docking locations for Soyuz spacecraft, Progress spacecraft and the Automated Transfer Vehicle, and its addition rendered the ISS permanently habitable for the first time. |
| *Destiny*(US Laboratory) | 5A | 7 February 2001 | Space Shuttle *Atlantis*, STS-98 | USA |  |  |
| The primary research facility for US payloads aboard the ISS, *Destiny* is intended for general experiments. The module houses 24 International Standard Payload Racks, some of which are used for environmental systems and crew daily living equipment, and features a 51-centimetre (20 in) optically perfect window, the largest such window ever produced for use in space. *Destiny* also serves as the mounting point for most of the station's Integrated Truss Structure. |
| *Quest*(Joint Airlock) | 7A | 12 July 2001 | Space Shuttle *Atlantis*, STS-104 | USA |  |  |
| The primary airlock for the ISS, *Quest* hosts spacewalks with both US EMU and Russian Orlan spacesuits. *Quest* consists of two segments; the equipment lock, that stores spacesuits and equipment, and the crew lock, from which astronauts can exit into space. |
| *Pirs*(lit. 'pier')(Docking Compartment) | 4R | 14 September 2001 | Soyuz-U, Progress M-SO1 | Russia |  |  |
| *Pirs* provides the ISS with additional docking ports for Soyuz and Progress spacecraft, and allows egress and ingress for spacewalks by cosmonauts using Russian Orlan spacesuits, in addition to providing storage space for these spacesuits. |
| *Harmony*(Node 2) | 10A | 23 October 2007 | Space Shuttle *Discovery*, STS-120 | Europe (Builder)USA (Operator) |  |  |
| The second of the station's node modules, *Harmony* is the utility hub of the ISS. The module contains four racks that provide electrical power, bus electronic data, and acts as a central connecting point for several other components via its six Common Berthing Mechanisms (CBMs). The European *Columbus* and Japanese *Kibō* laboratories are permanently berthed to the module, and American Space Shuttle Orbiters dock with the ISS via PMA-2, attached to *Harmony'*s forward port. In addition, the module serves as a berthing port for the Multi-Purpose Logistics Modules during shuttle logistics flights. |
| *Columbus*(European Laboratory) | 1E | 7 February 2008 | Space Shuttle *Atlantis*, STS-122 | Europe |  |  |
| The primary research facility for European payloads aboard the ISS, *Columbus* provides a generic laboratory as well as facilities specifically designed for biology, biomedical research and fluid physics. Several mounting locations are affixed to the exterior of the module, which provide power and data to external experiments such as the European Technology Exposure Facility (EuTEF), Solar Monitoring Observatory, Materials International Space Station Experiment, and Atomic Clock Ensemble in Space. A number of expansions are planned for the module to study quantum physics and cosmology. |
| *Kibō* Experiment Logistics Module(lit. 'hope' and 'wish' JEM–ELM) | 1J/A | 11 March 2008 | Space Shuttle *Endeavour*, STS-123 | Japan |  |  |
| Part of the *Kibō* Japanese Experiment Module laboratory, the ELM provides storage and transportation facilities to the laboratory with a pressurised section to serve internal payloads. |
| *Kibō* Pressurised Module(JEM–PM) | 1J | 31 May 2008 | Space Shuttle *Discovery*, STS-124 | Japan |  |  |
| Part of the *Kibō* Japanese Experiment Module laboratory, the PM is the core module of *Kibō* to which the ELM and Exposed Facility are berthed. The laboratory is the largest single ISS module and contains a total of 23 racks, including 10 experiment racks. The module is used to carry out research in space medicine, biology, Earth observations, materials production, biotechnology, and communications research. The PM also serves as the mounting location for an external platform, the Exposed Facility (EF), that allows payloads to be directly exposed to the harsh space environment. The EF is serviced by the module's own robotic arm, the JEM–RMS, which is mounted on the PM. |
| *Poisk*(lit. 'search')(Mini-Research Module 2) | 5R | 10 November 2009 | Soyuz-U, Progress M-MRM2 | Russia |  |  |
| One of the Russian ISS components, MRM2 will be used for docking of Soyuz and Progress ships, as an airlock for spacewalks and as an interface for scientific experiments. |
| *Tranquillity*(Node 3) | 20A | 8 February 2010 | Space Shuttle *Endeavour*, STS-130 | Europe (Builder)USA (Operator) |  |  |
| The third and last of the station's US nodes, *Tranquillity* contains an advanced life support system to recycle waste water for crew use and generate oxygen for the crew to breathe. The node also provides four berthing locations for more attached pressurised modules or crew transportation vehicles, in addition to the permanent berthing location for the station's Cupola. |
| *Cupola* | 20A | 8 February 2010 | Space Shuttle *Endeavour*, STS-130 | Europe (Builder)USA (Operator) |  |  |
| The Cupola is an observatory module that provides ISS crew members with a direct view of robotic operations and docked spacecraft, as well as an observation point for watching the Earth. The module comes equipped with robotic workstations for operating the SSRMS and shutters to protect its windows from damage caused by micrometeorites. |