Columbus is a pressurised module, adjacent to Japanese JEM modules, either side of the node 2 harmony module. Columbus uses a Japanese python add-on map, harmony supports the ESA and Japanese JEM modules, MPLM-shares its design and system technology with the SL Columbus laboratory to keep costs down and improve efficiency. ESA Columbus module is attached to the starboard hatch on the ISS

Columbus has 4 mounting points for payloads and packages dedicated to earth observation and has a solar observatory. A range of devices are exposed to space. Weight and power is key for all the devices on the module. There is a limited amount of electrical power. Continuous airflow should be monitored. The command mission control is entirely in German, from ESA Germany.