Kongsberg Spacetec AS

KONGSBERG

MEOS™ Geo HimawariCast

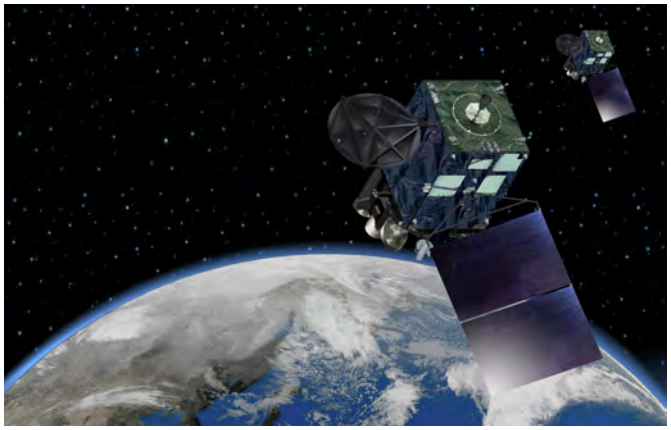
System for providing realtime data from HimawariCast.

The MEOS™ Geo HimawariCast ground station is a flexible and modular turnkey system for acquisition, archiving and processing of meteorological data from the Himawari satellite distributed by HimawariCast.

System architecture

The MEOS™ GEO HimawariCast is delivered as a turnkey system including all you need from real time data reception through data analysis and product distribution.
A typical configuration is shown on next page using one workstation for reception and processing and one or two additional workstations for the data analysis, publication, and forecasting. The receiving/processing workstation is equipped with an extra Ethernet adapter dedicated for reception of the multicast packets from the DVB-S2 receiver. This isolates the data packets to the network where it is needed without sacrificing bandwidth on the main network between workstations.

All processing up to completed SATAID files on disk is automatic. It is started at workstation boot-time without any need for operator interaction.



© Japan Meteorological Agency - Himawari-8/9.

Key Features

- Complete ground station
- Open architecture allows easy upgrading
- Microsoft Windows based environment
- Flexible, modular, and scalable design
- Automatic operation
- Extensive training, maintenance and support program

Monitor and Control

An elaborate Kongsberg quality graphical user interface (GUI) can be run on any of the workstations in the network, in addition to the receiving/processing workstation.

From this GUI the operator has complete status and monitoring control of all parts of the automatic reception and processing chain, including, but not limited to:

- receiver
  - setup
  - status
  - signal levels
  - performance
- files
  - reception
  - deMonitcompression
  - assembly
  - storage
- workstation
  - disk status
  - network status
  - health parameters

Note that the MEOS™ Geo HimawariCast is a professional, multi processor solution. The graphical user interface is completely isolated from the reception and processing tasks. Hence you may run zero, one, or several instances of the GUI without interfering with the routine operations.

MEOS
Multi-mission Earth Observation System

Options

The Receiving/Processing Workstation is also available for a high-end server-solution running Linux (SLES) instead of Microsoft Windows.

Front-End System

The Front-end system provides the functionality to receive the radio frequency and data to the ingest system and includes:

- 2.4m Geostationary antenna
- Filtered C-band feed/LNB
- DVB-S2 receiver/IP-router

Host Computers

All host computers typically runs Microsoft Windows operation system. They are equipped with state-of-the-art hardware, a recent model CPU, sufficient RAM for fast processing, and disk space dimensioned for the customer's data storage requirements.

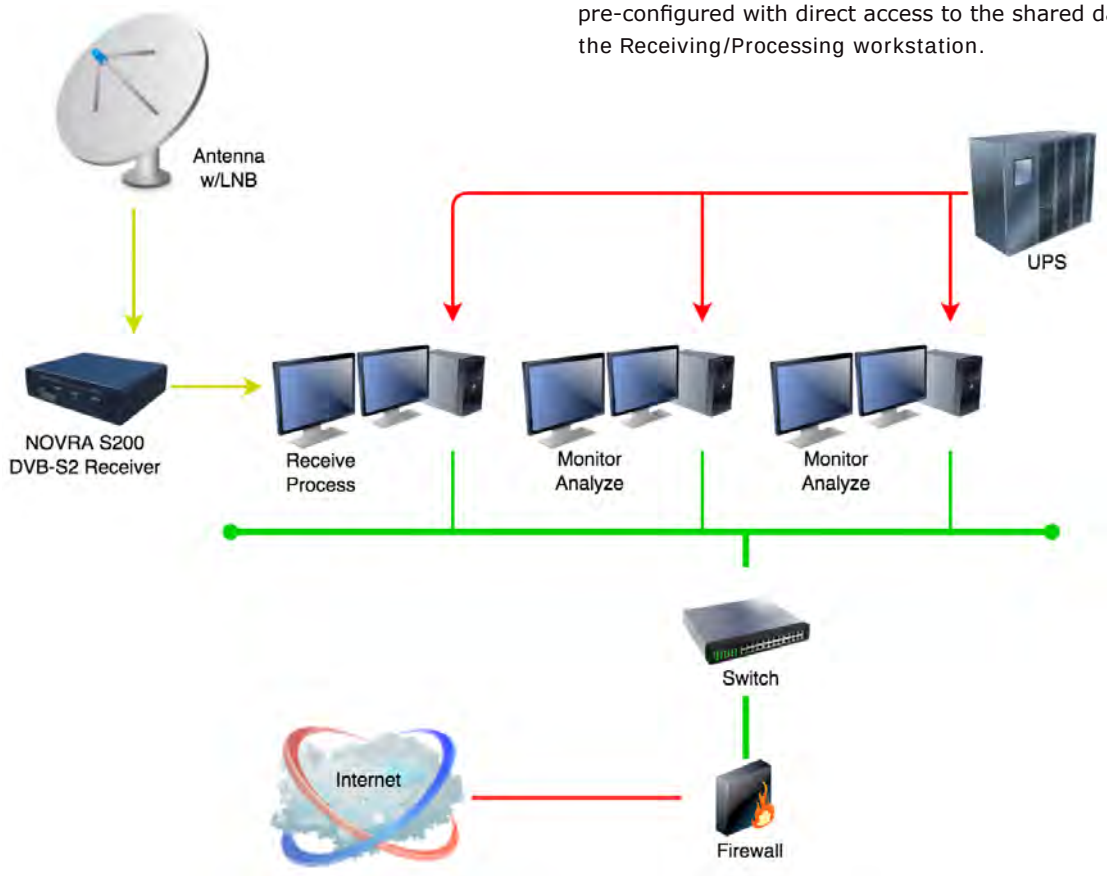
Receiving/Processing Workstation

The Receiving/Processing workstation comes with fully integrated, configured and tested KenCast Fazzt Professional Client for reception and storage of all data types disseminated via the HimawariCast service from The Japan Meteorological Agency (JMA). It also contains software for automatic conversion of HRIT and LRIT files to SATAID files for use with the SATAID software package from JMA, in addition to MEOS™ agents for monitoring and control. The Receiving/Processing workstation also hosts a shared data storage used as a rolling archive for the latest received and processed SATAID files. Tha rolling archive is an automatic disk space management system. The size of this archive is configurable according to customer needs.

Processing and Visualization Work Station

The processing and visualization work station is delivered with a preinstalled, configured and tested version of the SATAID software package from JMA. It also includes the MEOS™ Geo HimawariCast graphical user interface for monitoring and control.

All delivered Processing and Visualization Work Stations are pre-configured with direct access to the shared data store on the Receiving/Processing workstation.



Typical deployment model for MEOS™ GEO HimawariCast

Note:
MEOS is a registered trademark of Kongsberg Spacetec AS.
Specificatons are subject to change without notice.

KONGSBERG SPACETEC AS
Prestvannveien 38 P.O.B. 6244 Langnes NO-9292 Tromsø NORWAY
Phone: +47 77 66 08 00 Email: marketing@spacetec.no www.spacetec.no

KONGSBERG