

GOES BOX

GOES Weather Satellite System

Automated Sciences LLC

February 2003, Updated July 2004



GOES Box Rackmount Version

Introduction

GOES data and imagery is a powerful tool for meteorologists. The imagery is provided from the International GOES satellites in real-time at a resolution of 1Km in the visible channel and 4Km in each of up to four infrared channels. One of four satellites are receivable with the GOES Box and these cover most of the world. The satellite being received will provide imagery covering your region every fifteen minutes to one hour.

GOES Box System

The GOES Box, along with a 10ft (3m) or larger dish, and an appropriate feed provides a complete system. The system automatically ingests and stores the data allowing meteorologists or students to make use of the data using a powerful and easy to use image processing tool.



Typical GOES Dish with Integrated Feed

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The SuperLooper

The GOES Box includes the SuperLooper image processing and animation tool.



The SuperLooper displaying colored IR data

The SuperLooper is built around the concept of allowing you to easily zoom in on the desired data spectrally, spatially, and temporally using graphical methods. It then allows you to quickly enhance the data to bring out desired detail. Being true to its name, every operation is performed on the entire time lapse loop. In addition to using the SuperLooper on the GOES Box, it can be run inside a web browser over your organizations network on modern PC's and workstations.

The GOES Box and SuperLooper offer a unique combination of performance, features, flexibility, clarity, accuracy, ease of use, and affordability.

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The GOES Box is available in either a desktop or a rack mount version. If you are not sure which version will best suit your organization, contact us.

The GOES Box includes a strong basic feature set that will meet a wide variety of needs. If a desired feature is not listed in the feature list below contact us as a number of option packages are available that may satisfy your requirements. We also offer customized development services that provide a way to get desired functionality added to the product.

Key Features of the GOES Box	
Integrated Receiver	An integrated digital receiver capable of receiving data from the range of International Geostationary Environmental Satellites. Receiver is field configurable and upgradeable.
Integrated Dish Pointing	The GOES Box Receiver has integrated signal strength measurement and dish pointing software that allows you to point or re-point your dish at the satellite without requiring a spectrum analyzer.
Powerful Computing Platform	The GOES Box is based on a computer with the specifications listed below to provide ample power to quickly and efficiently work with the data.
Reliable Computing Platform	The GOES Box runs Linux as its operating system, the powerful ultra-reliable variant of UNIX that is used throughout the world for the most critical computing applications.
Includes a powerful image processing software package	Includes the SuperLooper image processing and animation tool. See the brochure covering this software for more information on capabilities.
Network Ready	The GOES Box provides the ability to utilize the data in the SuperLooper from a network connected PC or workstation in a web browser. You can administer and check the status of the GOES Box over the network. It also provides network access for the scientist or software developer to the raw data using a variety of methods.
Developer Friendly	An optional developers toolkit is available that allows for easy access and usage of the data in customer specific applications.

GOES Box Basic Specifications	
Processor	Intel Pentium IV at 3.0Ghz with hyperthreading
Memory	512MB of RAM (up to 2GB of RAM)
Hard Disk	Dual 120GB hard drive (Other configurations available)
Video	Intel Integrated graphics accelerator
Case	Mid Tower/4U Rack mount Case
Power Requirements	Voltage: 110V/220V, 50-60Hz AC, Power 200 Watts
RF Input	Center frequency 65-75Mhz, input level -40dbm to 0dbm, 50 ohm impedance
Integrated Feed	Feed/LNA/Downconverter 1680-1700Mhz, 65-85Mhz out, gain 70db, noise figure <1.0db
Data Source	NOAA GOES GVAR, JMA MTSAT HiRid/HRIT, or CMA FY-2 S-VISSR (factory configured)
Operating System	SuSe Linux 9.1 or greater distribution based on Linux 2.6.X kernel
Installed Software	Automated Sciences Ingestor, Gridded Data Server, SuperLooper, and other associated components. Tomcat Web Server, Netscape browser, Adobe Acrobat, and other commercial software.
Included Network License	Site license to use the SuperLooper on up to five workstations
Warranty	A two year limited warranty, contact us for details

Pricing and Availability

The GOES Box is a powerful, complete, and very affordable system. We offer both educational and volume discounts. Please contact us for a price quote. The desktop and rackmount versions of the GOES Box are available now and we can ship systems that do not require customizing within four weeks of receiving an order.