



# OBERON

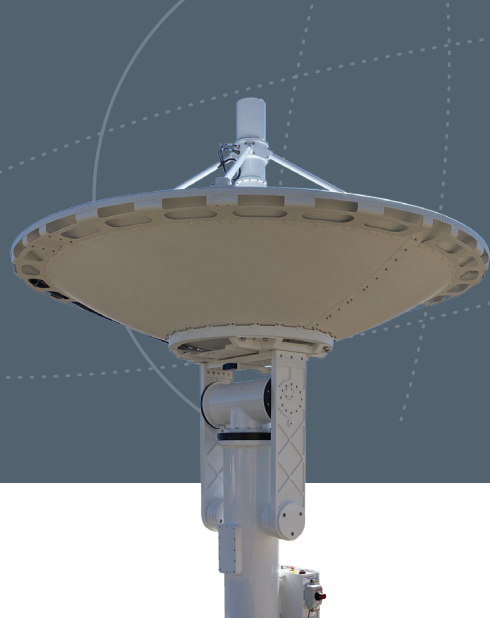
## XLE

XLE EOS Direct broadcast polar-orbiting satellite reception ground stations



# OBERON-XLE

Designed for more than 160 ocean, land and atmospheric analysis applications, the OBERON-XLE ground station is a robust and turn-key remote sensing solution.



## The complete satellite data collection system

The OBERON-XLE ground station gives you the tools you need to collect data from a wide range of polar-orbiting environmental satellite systems, including those operated by NASA, NOAA and EUMETSAT, and analyze that information depending on the system configuration that fits your needs. Covering land, sea and air, the OBERON-XLE provides the highest-quality imagery and sounding data profiles for use by meteorological, oceanographical and disaster-relief agencies, as well as military and research organizations.

Integrated software offers both high- and low-resolution options for the collection and processing of X- and L-Band data, and provides baseline services in a seamless manner.

From manufacturing and engineering to final installation and training, the OBERON-XLE ground station is a turn-key system created specifically to deliver the complete picture from meteorological, environmental and military direct-broadcast satellites.

## OBERON-XLE ADVANTAGES

- A complete and fully integrated bundle that receives X and L band direct broadcast data and processes it to level 2
- Automatic TLE updates as well as remote diagnosis and software updates
- Simple and affordable installation
- Typical time from purchase to installed and operational system is 4 months

## LEVEL-2 SCIENCE PRODUCTS DERIVED FROM:

- Terra/Aquas MODIS
- NOAA-18/19: AVHRR, AMSU-A, MHS, and HIRS
- NOAA-20/S-NPP: VIIRS, CrIS, and ATMS
- MetOp-A/B: AVHRR, AMSU-A, MHS, HIRS, and IASI
- METOP-SG-A1/B1

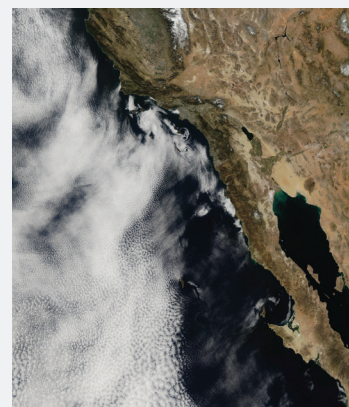
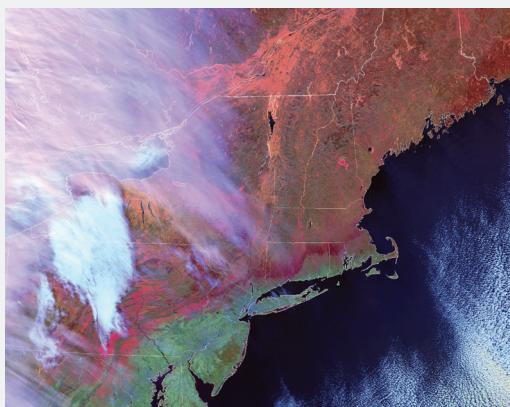
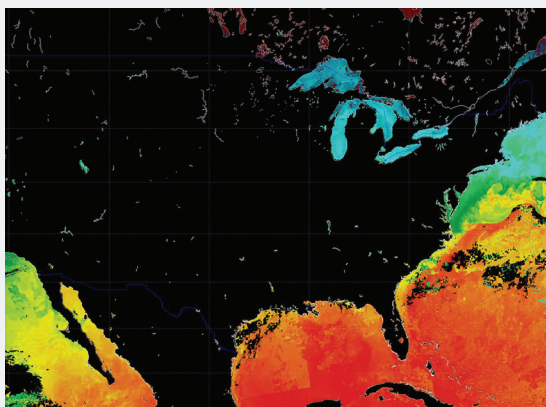
## DATA SOURCES:

- NASA Terra and Aqua
- NOAA-18, 19 & 20
- NOAA Suomi NPP
- EUMETSAT-METOP
- CMA Fengyun

## APPLICATIONS

- Meteorology and Weather Forecasting
- Physical & Biological Oceanography
- Hydrology
- Fisheries
- Agriculture & Forestry
- Climate and Global Change Studies
- Land-based Change Detection Studies (e.g. urbanization, tropical deforestation, desertification)

## DISPLAY EXAMPLES



## OBERON-XLE PERFORMANCE SPECIFICATIONS

### ANTENNA:

Reflector	2.4m, solid spun aluminum		
F/D	0.36		
Feed	X-Band prime focus scalar with L-Band on axis feed		

### X-BAND:

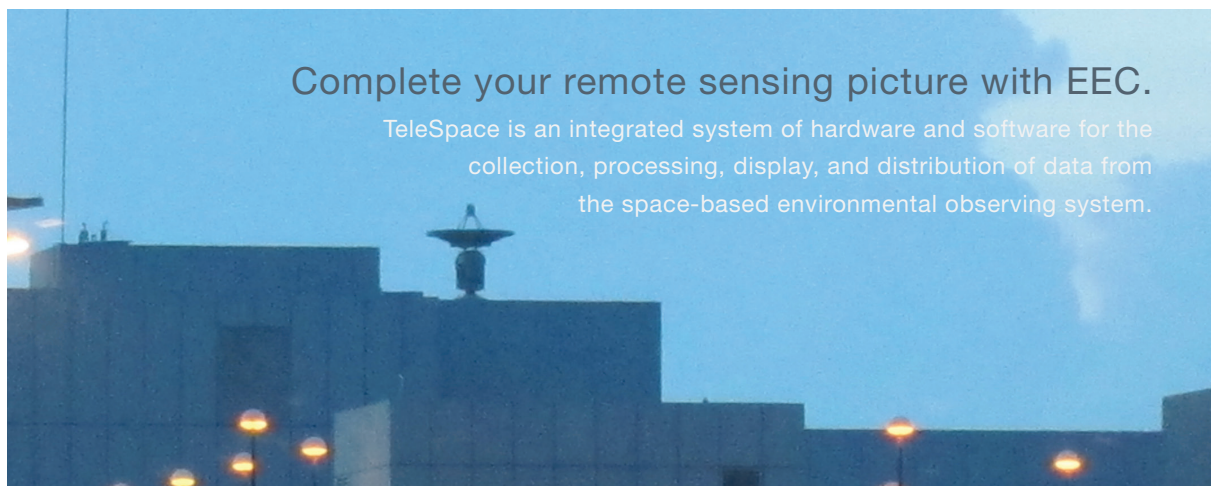
X-Band Operating Frequency	7700 MHz	thru	8500 MHz
Reflector 3 dB Beamwidth	1.05°		0.97°
Reflector Gain	43.5 dB		44.2 dB
*G/T Minimum With System Noise Temp <100 K	23.5 dB/K		24.2 dB/K
*G/T Typical Performance	24.0 dB/K		24.6 dB/K
LNC Noise Temperature	<50 K		
LNC Overall Conversion Gain X to IF	60 dB typical		
Synthesized Downconverter Step Size	100 KHz		
Local Oscillator Temperature Stability	+ 5 ppm		
IF Output	140 MHz		

### L-BAND:

L-Band Operating Frequency	1682 MHz	thru	1710 MHz
Reflector 3 dB Beamwidth	4.9°		
Reflector Gain	30.0 dB		
*G/T Minimum With System Noise Temp <120 K	10 dB/K		
*G/T Typical Performance	10 dB/K		
LNB Noise Temperature	90 K (preselected)		
LNB Conversion Gain	60 dB typical		
Local Oscillator Frequency (Block Downconverter)	100 KHz		
Local Oscillator Temperature Stability	+ 2.5ppm		
IF Output	140 MHz		

### DEMODULATOR:

Form Factor	1 U rack-mounted
Input Frequency	Software selectable: 1250 ± 200 MHz, 720 ± 100 MHz, 140 ± 15 MHz
Demodulator Modes	BPSK, QPSK, SQPSK
M&C Interface	10/100/1000 BASE-T Ethernet
Data Interface	10/100/1000 BASE-T Ethernet
RF Test Port	SMA (Female), 50 Ω



Complete your remote sensing picture with EEC.

TeleSpace is an integrated system of hardware and software for the collection, processing, display, and distribution of data from the space-based environmental observing system.

## INTEGRATED HARDWARE AND SOFTWARE FOR SATELLITE DATA RECEPTION



**PROTECTING PEOPLE AND ASSETS®**

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