

# EUTELSAT 5 West B

Ku-Band Commercial Communications Satellite

## FACT SHEET



### Mission Description

Orbital ATK was selected by Eutelsat Communications to build the EUTELSAT 5 West B satellite. The company will team with Airbus Defence and Space to build the spacecraft, marking the first time the two organizations have partnered on satellite work. The spacecraft will also incorporate a European Global Navigation Satellite Systems Agency (GSA) EGNOS payload. EGNOS is a European Geostationary Navigation Overlay Service that augments Global Positioning Systems to improve the accuracy and reliability of positioning information.

EUTELSAT 5 West B will be designed, built and tested at Orbital ATK's state-of-the-art satellite manufacturing facility in Dulles, Virginia. The spacecraft will have an operational lifetime of more than 15 years as a broadcast satellite, replacing the current satellite at Eutelsat's 5° West longitude orbit slot. EUTELSAT 5 West B will mainly serve video markets in Europe and North Africa.

### The GEOSTAR™ Heritage

Orbital ATK's highly successful Geosynchronous Earth Orbit (GEO) communications satellites are based on the company's GEOSTAR spacecraft platform, which is able to accommodate all types of commercial communications payloads and is compatible with all major commercial launchers. The company's GEOSTAR product line includes the GEOSTAR-2 design, which is optimized for smaller satellite missions that can support up to 5.0 kilowatts of payload power. Orbital ATK has also developed the higher-power GEOSTAR-3 spacecraft design, delivering the next increment of payload power for applications between 5.0 and 8.0 kilowatts, allowing Orbital ATK to offer its innovative and reliable satellite design to the medium-class of communications satellites.

### FACTS AT A GLANCE

#### Coverage:

Europe and North Africa



#### Mission:

Ku-Band communications

#### Customer:

Eutelsat

# EUTELSAT 5 West B

## Specifications

### Spacecraft

Launch Mass:	2740 kg
Solar Arrays:	Two 4-panel solar wings with UTJ cells
Stabilization:	3-axis stabilized, using thrusters and reaction wheels; zero momentum biased
Propulsion:	Liquid bi-propellant transfer orbit system; monopropellant (hydrazine) on-orbit system
Batteries:	Li-ion batteries
Mission Life:	>=15 years
Orbit:	5 Deg West Longitude

### Payload

#### Ku-Band

Repeater:	35 Active transponders
Antenna:	Two deployable single offset reflectors, 2.6m

### Launch

Launch Vehicle:	Proton M
Site:	Baikonur, Kazakhstan
Date:	2018

## Mission Partners

### Eutelsat

A leading global satellite operator providing a broad range of communications services

### Airbus Defence and Space

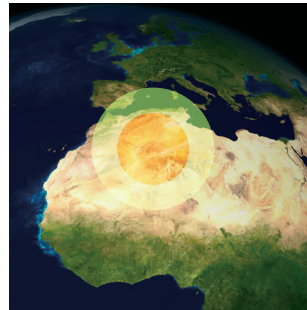
Communications payload of 35 active Ku-band channels.

### Orbital ATK

Design, integration and test of the Eutelsat 5 West B (5WB)

## Coverage Contour Map

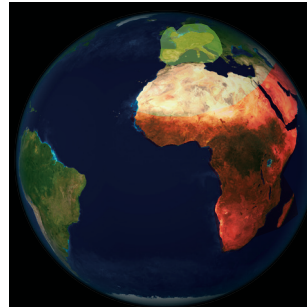
Algeria Coverage Contour



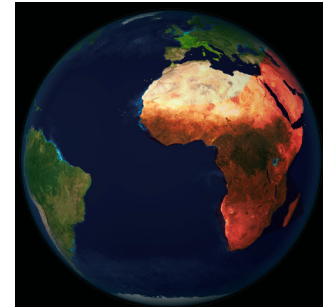
Europe Uplink/Downlink Coverage Contour



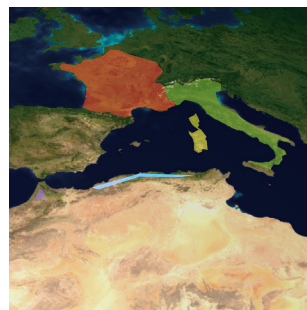
All Europe Coverage Contour



Europe TA Coverage Contour



Transapline Rx Contour



Transapline Tx Contour

