C Tech Bilişim Teknolojileri San. ve Tic. A.Ş.

SATELLITE TELEMETRY COMMAND & RANGING (TCR) SUBSYSTEM & EQUIPMENT

C Tech Bilişim Teknolojileri San. ve Tic. A.Ş.

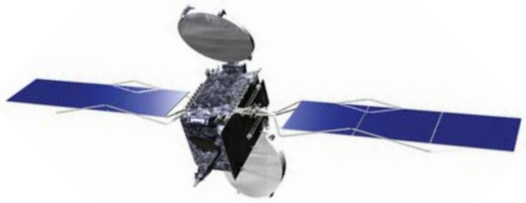
OVERVIEW

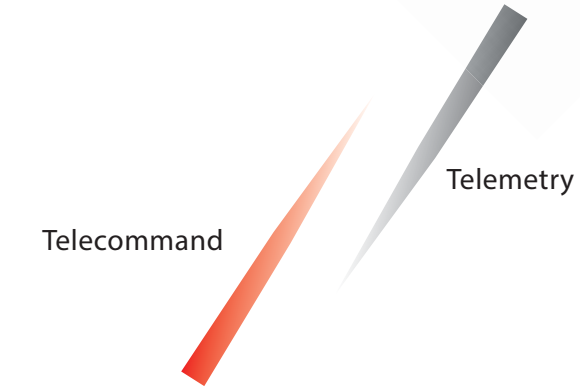
Satellite Telemetry, Command & Ranging System is comprised of the equipment needed to transmit data from the satellite to the ground in the form of telemetry , an interface to receive commands from the ground and provides paths to ranging signals for range measurements used in orbit determination.

DESCRIPTION / FEATURES

CTech provides complete TCR solution for satellites, composed of antennas, RF components, Telemetry / Beacon Transmitters and Command Receivers. CTech TCR solution is developed as a Ku Band system for Geostationary Communications Satellites and it can easily be adapted for other missions and frequency bands (Ka, C, S, X, etc.) to maintain a link between ground segment and the satellite. In house designed equipments, antennas and RF components of the system are as follows:

Ku Band Telemetry/Beacon Transmitter
Ku Band Command Receiver
Omni Rx Antenna
Omni Tx Antenna
Horn Antenna
OMT
Polarizer
Hybrid Coupler
Diplexers
Waveguides
Waveguide Power Combiner





TCR Subsystem

Operating Frequency : Ku Band
Mission Life: 22.5 years
Standards: ESA ECSS compliant

Ku Band Command Receiver

Frequency: 12.75 to 14.5 GHz
Modulation: BPSK / FM
Mission Life: 22.5 years
Standards: ESA ECSS compliant

Ku Band Telemetry/Beacon Transmitter

Frequency : 10.7 to 12.75 GHz
Modulation: PM
Mission Life: 22.5 years
Standards: ESA ECSS compliant

*The TCR subsystem and all of the specified components shall be launched with TURKSAT 6A in 2020

C Tech Bil. Tek. San ve Tic. A.Ş (C2Tech)
Teknopark İstanbul 1. Blok Kat 2, Pendik, İstanbul, Turkey
Tel: 0850 480 77 44 **Fax:** +90 216 290 52 88
www.ctech.com.tr