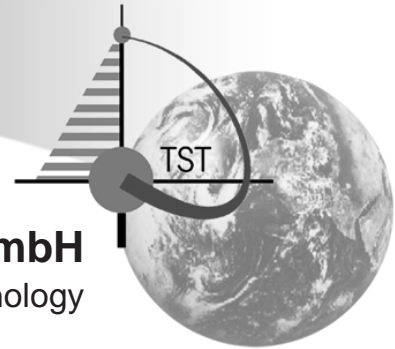


TST Kommunikationstechnik GmbH
Commercial Satellite Technology



Sat Trailer



3,7 m Gregorian antenna

high antenna gain

wide transmit frequency range

up to 6 port feed system

transmit equipment on Trailer

ACU with Step Track system

easy and fast setup

weight less than 2,8 t

Technical Description

The "Sat-Trailer" is a mobile multipurpose satellite earth station. With a 3.7m parabolic antenna mounted on a heavy duty tandem axle trailer, the "Sat-Trailer" offers quick access to different satellites in different frequency bands.

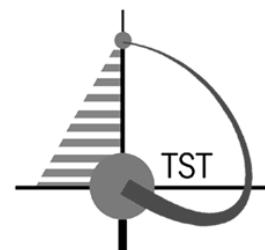
The mounting frame and the complete structure are made from aviation aluminum. All other parts are stainless steel. Ball bearing spindles are used for positioning the antenna. The rigid construction allows transmission up to 70 km/h winds without degradation.

Every needed RF equipment is mounted in vibration absorbing outdoor boxes on the "Sat-Trailer". The wide range of mountable RF equipment allows flexibility for serving the customers demand.

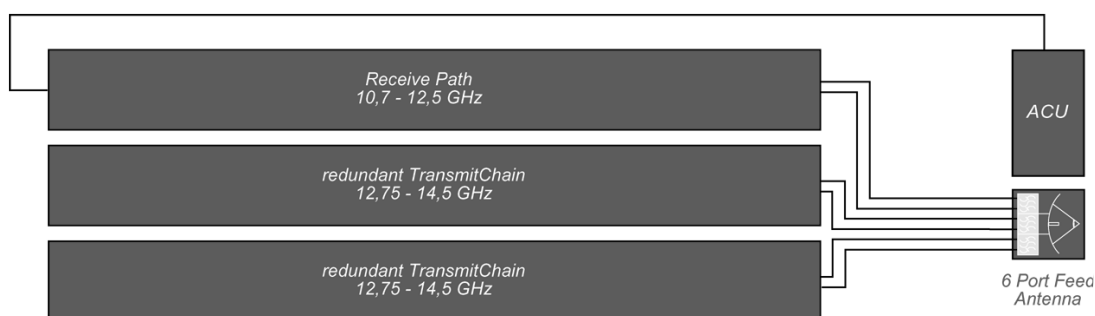
Equipped with different feed systems and RF components, this station provides transmit capacity up to 80 dBW EIRP at 12.75 – 14.5 GHz or 82 dBW EIRP at 17.3 – 18.4 GHz. Up to 4 HPA's can be mounted on the back structure of the antenna mount.

The RF equipment is controlled by the TST M&C system with an implemented automatic redundancy function and a Step-Track-System. This TST M&C allows also a remote control of the Station by LAN or dial up modem.

The wave guide switching is pressurized by an dehydrator. As a de-ice system a half reflector heating including feed heater is mounted.



Sat Trailer



Technical Specification

Dimensions and weight (transport position)

width:	2,50 m, max. 5,07 m
height:	3,95 m
length:	5.20 m without draw bar
weight:	max. 2.8 to braked

Antenna

Frequency range

TX	12.75 – 14.50 GHz
	17.30 – 18.40 GHz
RX	10.70 – 12.50 GHz

Environmental specifications

Operational winds	70 km/h, gusts to 95 km/h
Survival wind	200 km/h
Ambient temperature (operational)	-30°C to +50°C
Rain (operational)	max. 80 mm/h
Radial ice (operational)	max. 10 mm on all surfaces except reflector
Solar radiation (operational)	max. 1 kW/m ²

Typical Gain

10.70 GHz	50.3 dBi
10.95 GHz	50.4 dBi
11.95 GHz	51.2 dBi
12.75 GHz	51.7 dBi
13.25 GHz	52.0 dBi
13.75 GHz	52.3 dBi
14.00 GHz	52.4 dBi
14.25 GHz	52.5 dBi
14.50 GHz	52.7 dBi
17.30 GHz	54.8 dBi
18.40 GHz	55.2 dBi

Noise Temperature

30°	58K
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