

TVRO



Overview

At Kratos we have wide ranging experience of TV Receive Only (TVRO) antenna farms for Satellite News Gathering (SNG) and DVB Ingest applications for re-broadcast.

TVRO, although simple in its concept, can become complex when it involves multiple satellite feeds from multiple antennas. Extensive cabling, LNB power supplies and controls, slope compensation and signal matrix management is needed to ensure that the satellite signals reach the receiver banks with the right C/N and signal level to be usable for the application.

Antennas

As an integrator, we have access to a wide range of antenna size, types and manufacturers so we can select the most economic solution for our customers:

- Antennas Sizes: Ranging From 0.5m through to >5m
- Frequency Bands: C-band, X-band, Ku-band, K-Band and Kaband
- Multi-beam satellite dish solutions
- Fixed or motorized
- High wind speed options
- De-ice options

Baseband

The RF signal from the TVRO antenna system (usually converted to L-band) is generally managed via an L-band Switch Matrix. The Matrix allows for the L-band inputs signals to be split and switched to one or more outputs, that are then connected to the various baseband system component inputs.

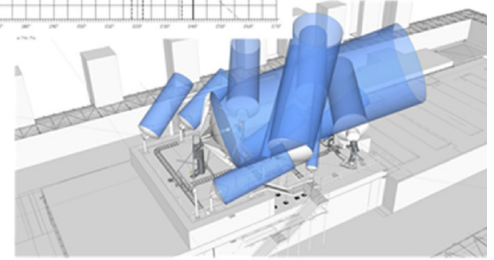
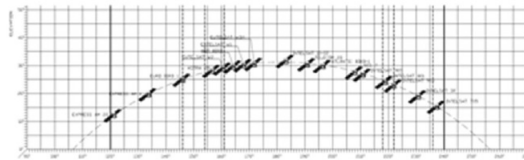
The TVRO baseband systems can vary in scope considerably. Typical our installations can include the following key elements:

- Antennas and LNBS
- L-band Feeds and cable management
- IRDs (with ASI, SDI, TSolP, etc. output)
- NOC Room Environment fit out
- Multi-Viewers and Video Monitor walls
- Audio monitoring (Speaker systems and audio test equipment)
- TS Analyzers (for signal quality monitoring)

Installation Design

TVRO systems quite often need to be installed in confined spaces with satellite visibility constraints or building roof tops with space and loading constraints.

We work within the constraints of the customer site to minimise the space required and maximise satellite visibility. We have well-established CAD and 3D modelling tools to enable this to be achieved efficiently and effectively providing maximum value for our customers.



At Kratos we have provided various roof-top foundation solutions, including load-frame solutions to spread antenna loads and avoid penetration of the weather proof seal in roof-top environments. We have also provided Chem-Anchor solutions, where existing foundations or concrete load beams are utilized, and Non-Penetrating Mount solutions (NPM).

For roof top installation, crane access can be a serious consideration. Kratos has extensive experience in roof top installations and know that weather conditions and Health and Safety risks are all important factors that need to be considered.

