

**The Camlica Tower in Istanbul/Turkey is equipped with top technology from KATHREIN and SIRA.**



History and reason, why KULE Verici Tesisleri İşletim Ve Teknolojileri a. S., decided working with KATHREIN and SIRA for installing antennas and combiners at Camlica Tower.

“The KULE management initially planned for a total of 80 broadcasts with 4 antenna systems and a 20-way combiner chain. Kathrein was the only company that assured us it was possible to create the desired setup, while others expressed limitations.

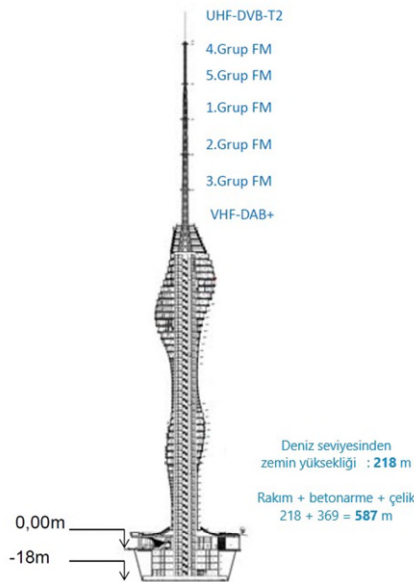
In the Turkish broadcasting sector, Kathrein and SIRA are recognized as reliable companies with experienced engineering and technical teams. To mitigate risks in this major project involving 100 broadcasts, we selected Kathrein for the antenna and combiner systems, and Rohde & Schwarz for the transmitter systems.

The decision to expand from 80 to 100 broadcasts posed challenges in terms of capacity. Kathrein suggested the allocation of space for a 5-antenna system with 20-way groups within one of the steel antennas, accommodating the operation of 100 broadcasts. The management approved this solution, making adjustments to the VHF antenna system.

The antenna systems' installation was completed in July 2020, followed by a 2-month testing period. In September 2020, we successfully launched 100 broadcasts from a single tower, marking a significant achievement.”

Statement of Mr. Berke Bilal Cinibulak from KULE

The Antenna Systems:

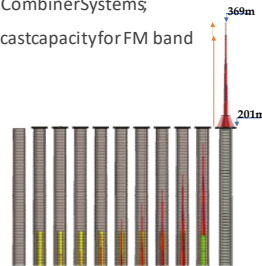


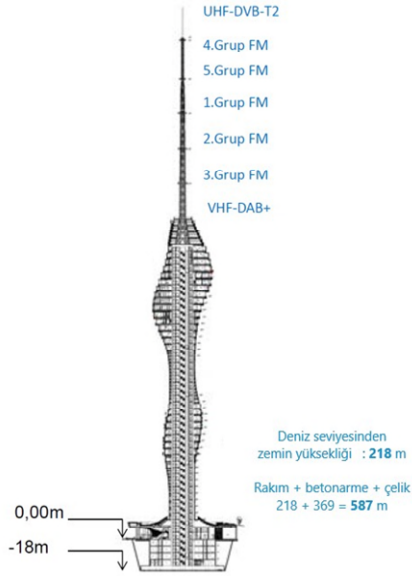
KULE VERİCİ TESİSLERİ İŞLETİM VE TEKNOLOJİLERİ A.Ş.

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## Antenna Systems

- 5 Group FM Antennasystems
  - 1. Group 8X4 Antenna (8 baysx 4 direction) - 100Kw - Used Kathrein K53 32 187 Antenna
  - 2. Group 8X4 Antenna (8 baysx 4 direction) - 100Kw - Used Kathrein K53 32 187 Antenna
  - 3. Group 8X4 Antenna (8 baysx 4 direction) - 100Kw - Used SIRA FMC-03 Antenna
  - 4. Group 6X4 Antenna (6 baysx 4 direction) - 100Kw - Used SIRA FMC-03 Antenna
  - 5. Group 4X4 Antenna (4 baysx 4 direction) - 100Kw - Used SIRA FMC-03 Antenna
- 5 Group 20x5Kw Combiner Systems
- 100 Radiobroadcast capacity for FM band



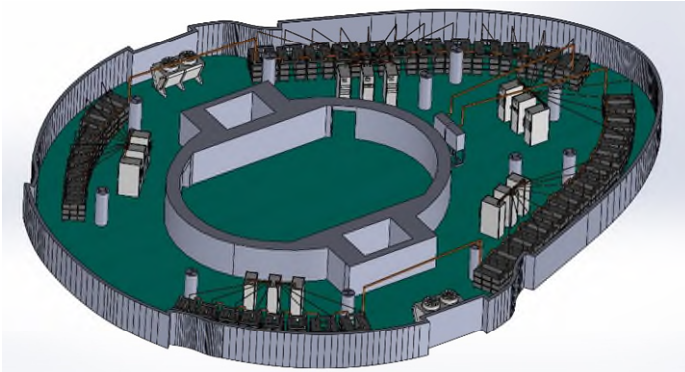


## Antenna Systems

- 2 Group DVB-T2 Antenna Systems;
  - 1. Group 8x4 UHF Antenna (8 bays + 4 direction) 70kW - Used Kathrein 750 10213 Antenna
  - 2. Group 8x4 UHF Antenna (8 bays + 4 direction) 70kW - Used Kathrein 750 10213 Antenna
  - 2 Group 7x10Kw Combiner Systems (for DVB-T2),
  - 54 Digital TV Broadcast Capacity
- 1 Group DAB+ Antenna Systems;
  - 8x4 VHF Antenna (8 bays + 4 direction) 25kW - Used Kathrein K52305 Antenna
  - 5x5kW Combiner System
  - 80 DAB+ capacity



### The Combiner System







Before and after:



Many thanks to  for all support in publishing.

