SPACE RELATED PRODUCTS

GROUND & SPACE SEGMENT

BHE BONN HUNGARY ELECTRONICS LTD.

WWW.BHE-MW.EU

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OVERVIEW

BHE Bonn Hungary is the leading space technology company in Hungary. BHE employs engineers having space technology heritage of more than 30 years. Under different flags, we have been participating in numerous satellite projects and missions.

BHE has significant heritage in developing and manufacturing onboard and ground based space communications subsystems and equipment. BHE is ready for cooperation with other companies in this field and is open for joint development or manufacturing including technology transfer. BHE is the leading force of the Hungarian Aerospace Technology Platform (HATP). This organisation collects the 90% of the Hungarian scientists and engineers who have space heritage and experience.

MAIN REFERENCES

INDIA'S SATELLITE ENTERED THE ORBIT OF THE MARS

Several news portals announced the launch of India's 1st Mars satellite (MOM) in November 2013, and it's orbit insertion around the Red Planet in 24th of September 2014, followed by sending images and other data back to Earth. BHE - as a long time player in space ground segment - supplied the S- and Ku-band specific phase coherent 3-channel down converters to receive telemetry and Doppler signals from the Indian Mars Orbiter. These devices are used both on Indian tracking stations and tracking ships.

BHE IS ON-BOARD OF ISS

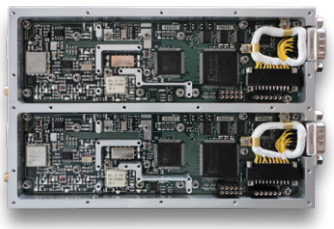
On 19th of June 2014 two astronauts successfully installed the S-band phased array communication antenna system outside of the Zvezda Module of International Space Station (ISS), during a long space walk. The purpose of this antenna system is to provide reliable digital TM/TC and data communication through the recently launched LUCH-5 data relay GEO satellites. The heart of the antenna system, - the BPBS28 S-band Solid State Power Amplifier -, has been developed and manufactured by BHE.

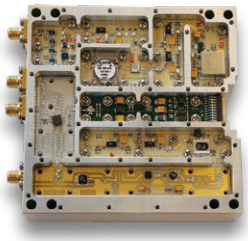
A NOVEL S-BAND ON-BOARD TRANSMITTER FOR SMALL SATELLITES

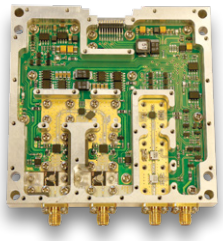
At the end of 2015 BHE finished the development of an on-board spectral and power efficient S-band telemetry and data transmitter. The small, lightweight, ITAR-free and fully ESA compliant device was designed with small satellites constraints in mind, - but gives flexibility to users comparable with heavy/professional satellite devices.
In order to achieve this goal, our company developed a satellite-board software defined radio (SDR) with advanced modulations and coding used by professional scientific and remote sensing satellites, but also provide standard modulations, coding and data rates used by less complicated (simpler) small satellite ground stations.

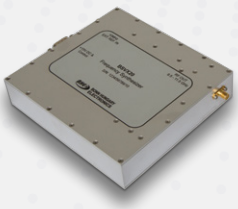
SPACEBORNE

- High efficiency Solid State Power Amplifiers
- Telemetry Transmitters based on Software Defined Radio technology
- Digital Telecommand Receivers based on SDR technology
- High data rate Digital Transmitters for data downlinks
- Spectrally efficient Digital Modulators with different data rates and coding
- Low phase noise RF & Microwave Synthesizers and Oscillators
- Microwave Front-Ends & T/R Modules
- RF & microwave subsystems for Synthetic Aperture Radar
- Up & Down Converters



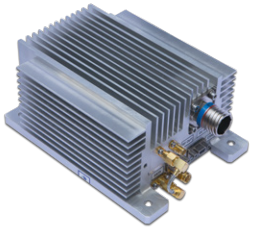


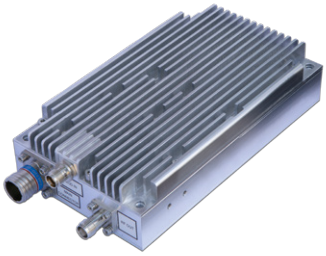




AIRBORNE

- Compact Telemetry Transmitters
- Digital Command Receivers
- RF & microwave subsystems for TACAN & IFF
- Airborne SAR
- High resolution Microwave Altimeter
- Digital Telecommunication Data Transmitters
- On-board radar subsystems
- Telemetry Transmitters based on Software Defined Radio technology



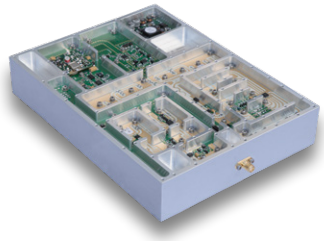
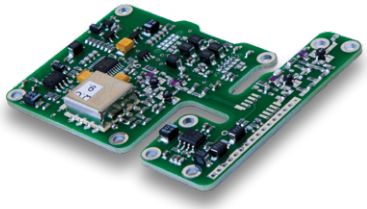
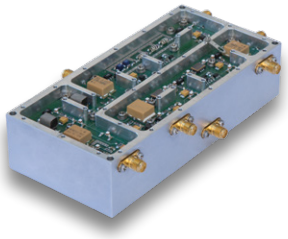
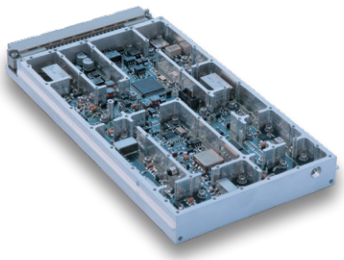
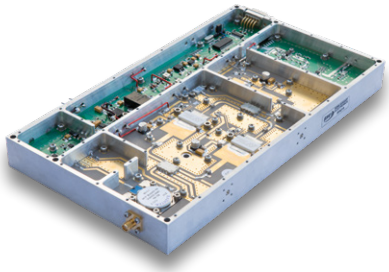
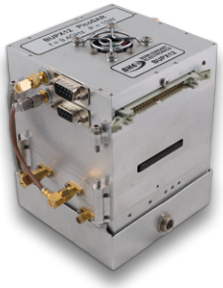


GROUND SEGMENT

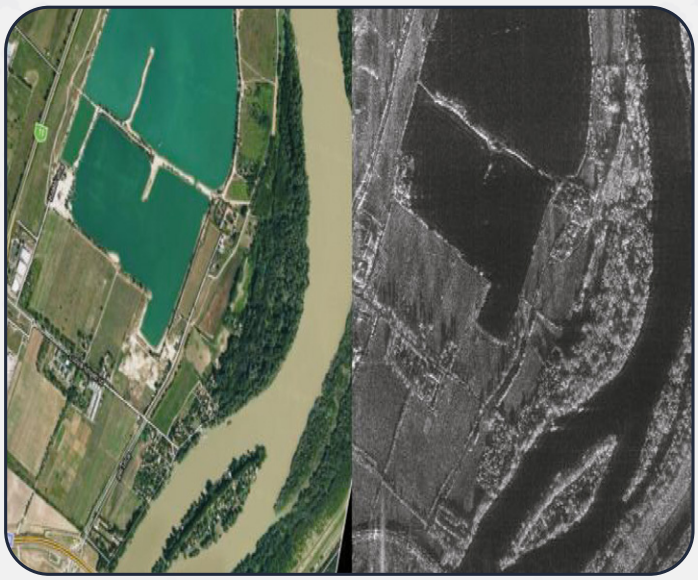
- Microwave Feeds with high cross polarisation isolation
- Microwave LNAs, LNBs
- Low Noise Up & Down Converters
- Digital Demodulators
- Low phase noise, high resolution Frequency Synthesizers
- Digital Satellite Modulators & Transmitters
- High power Solid State Smart Amplifiers
- Digital Telemetry Receivers
- Test Loop Translators for satellite link simulation

RADAR SUBSYSTEMS

- RF and microwave subsystems for advanced Radars
- Digital signal processors and modulators for different Radars
- Miniature airborne Synthetic Aperture Radar
- Airborne Radar Altimeters
- RF & Microwave Front-Ends for active Phased Array Radars
- Special test instruments for Phased Array Radars
- Custom specified radar subsystems

HIGH RESOLUTION SAR PICTURES



ANECHOIC EMC TEST CHAMBER

BHE Bonn Hungary Ltd. has been developing and manufacturing advanced RF & microwave subsystems, payloads and instruments for the aerospace & space industry from VHF to Ka-band applications for more than twenty years.

HU AQAP 2110 AQAP 2210 · SUITABLE SUPPLIER FOR NATO TENDERS · BUDAPEST BRAND 2014 · CERTIFIED AS 9100 · CERTIFIED ISO 9001

Facility Security Clearance since 2020

These certificates refer to BHE's quality management systems. All our products are manufactured according to ISO 9001. Other, sector-specific management systems are only used in case of the customer's explicit request.

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