

Media Information March, 2024

# WORK Microwave presents the Communication Package for "Digital Optical Ground Station<sup>®</sup>"

Holzkirchen, Germany - WORK Microwave, one of the leading manufacturers of advanced satellite communications equipment, presents its end-to-end Communication Package suite of equipment for multi-mission optical ground stations according to SDA and CCSDS standards.

The Package consists of a suite of equipment which enables bi-directional communication according to Version SDA OCT Standard Version 3.0.1 ("SDA Tranche 1") and 3.1.0 ("SDA Tranche 2") and CCSDS 142.0-B-1.

Based on numerous internal and external compatibility tests including different space terminals, the Communication Package will be qualified for SDA compliant deployment within the next months.

Later this year, WORK Microwave will install the first SDA Tranche 1 compliant turn-key optical ground station including telescope, Communication Package and shelter infrastructure.

The Communication Package consists of the DOG-DA Free-Space Optical Detector, the DOG-M1 Multi-Mission Modem, the DOG-CA Electro-Optical Converter and DOG-A1 Amplifiers.

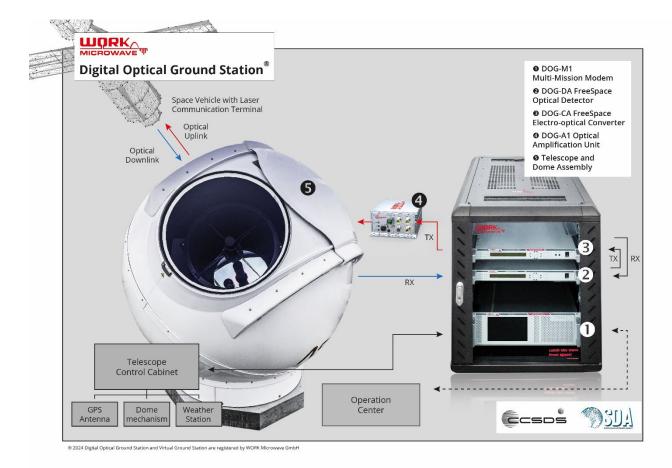
As the central element of the communication package, the DOG-M1 Modem handles the processing of the data according to selected standards in terms of error protection, timing, ranging and adaptation of networks and transfer frame streaming on the data interfaces.



The DOG-M1 also acts as a central control unit of all optical downstream devices.

Compatible with data rates from 100 Mbps to 10 Gbps, DOG-M1 will enable optical communication missions at low and extremely high throughput rates with secure data connection to satisfy a growing demand for a large variety of institutional and commercial space missions. Active optical devices – detectors, converters and amplifiers - are available with different wavelength configurations across the optical C- and L-band. The DOG-A1 Amplifiers supports multiple power configurations according to link budget requirements for communication and tracking.





"With the implementation of the SDA standard in addition to the CCSDS waveforms in our Communication Package we are setting a new milestone in our Digital Optical Ground Station offering. We observe a global trend of recognition of the SDA standard as the dominating standard for laser communication, and we at WORK Microwave are proud to be a key player among the pioneers in this technology. With a strong focus on technological innovation, excellence and relentless customer orientation, our company is a trusted partner in the industry worldwide. This success is the result of intense work and dedication of our engineering team" said Thomas Fröhlich (CEO).

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### About WORK Microwave (www.work-microwave.com)

Headquartered in Holzkirchen (near Munich), Germany, and comprised of four product lines — Satellite Communication, Navigation Simulators, Defence Electronics, and Sensors & Measurement — WORK Microwave leverages over 35 years of experience to anticipate market needs and apply an innovative and creative approach to the development of its technologies while maintaining the highest standards for quality, reliability, and performance.

WORK Microwave's Satellite Communication division develops and manufactures highperformance, advanced satellite communications equipment for earth observation and science missions, NGEO constellations, IP networks, government communication, direct-tohome broadcast, teleport management, and many more applications.

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Photo Link: https://work-microwave.com/wp-

content/uploads/2024/03/DOG M1 Communication Package-scaled.jpg

Photo Caption: WORK Microwave Communication Package for "Digital Optical Ground Station®"

Photo Link: https://work-microwave.com/wp-content/uploads/2024/03/DOG Chart.pdf

Photo Caption: WORK Microwave DOG Chart

Photo Link: https://work-microwave.com/wp-content/uploads/2024/03/ODU\_C7\_OA\_3OPT-scaled.jpg

Photo Caption: WORK Microwave Optical Amplifier

## **Company Contact:**

WORK Microwave GmbH Rudolf-Diesel-Ring 2 83607 Holzkirchen Germany

## Jörg Friedrich, Marketing Manager

Tel. +49 8024 6408 207 Cell +49 1590 1217065

Email: joerg.friedrich@work-microwave.com

#### **Networks:**

LinkedIn <a href="https://www.linkedin.com/company/work-microwave-gmbh">https://www.linkedin.com/company/work-microwave-gmbh</a>

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