planetek italia

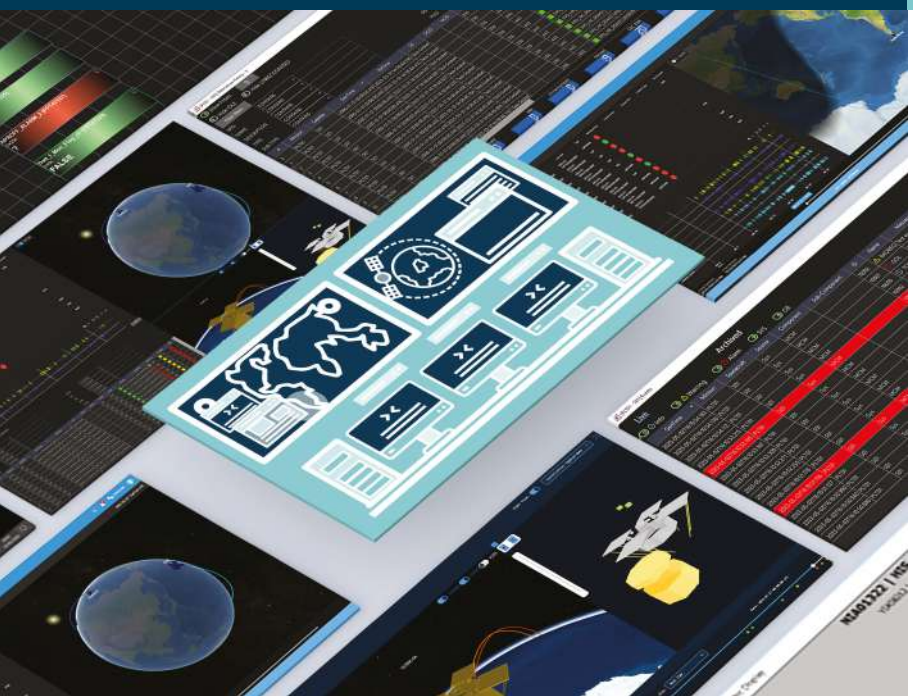
ERMES

MISSION CONTROL SOFTWARE SUITE

ERMES is a modular, flexible and interoperable software addressing Mission Operations activities for S/C Platforms and Payloads. It also fits to Integration, Testing and Check-Out activities.

Mission Control System	Spacecraft Planner	Payload Control Center	Payload Planner	Master Test Processor
Central Check-Out	SCOE Controller	Front End Manager	Spacecraft Simulator	Test Conductor Console

ONE SUITE MANY APPLICATIONS.



READY FOR THE FUTURE. TODAY.

ERMES fits within NewSpace and traditional ground segments implementing custom and standard protocols, such as the CCSDS and the CubeSat Space Protocol.
It interfaces with most Ground Station service providers (Leafspace, KSAT, AWS, etc.) with their specific APIs and implements the CCSDS SLE protocol.
Spacecraft monitoring and control implements service-based and packet-based paradigms: ERMES fully integrates ECSS PUS (both A and C) and SCOS2K mission databases.
It also provides all the system functionalities via a Python-based scripting engine.

- Bytewise/Bitwise full packet inspection
- SLE and GSaaS ready
- Alphanumeric & graphic monitoring display
- Assisted TC editing and instance export
- Multimission
- Distributed Architecture
- Multi-user

- Contacts management
- TMTC live/history monitoring
- TC stack for manual and automatic execution
- Test preparation for automation
- ECSS Packet Utilization Standard (PUS) compliant
- CCSDS Space Packet Protocol compliant
- SCOS2000 MIB format

SUITABLE FOR EVERYTHING

PKS080-01-v1 This document is published under Creative Commons licence CC BY-ND 4.0

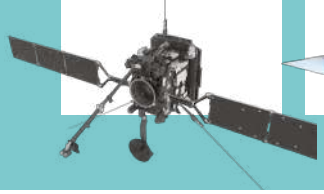
A VERSATILE TOOL FOR SPACE MISSIONS.

The system is cross-platform. Its backend can be deployed both in a Windows and Linux architecture and on a cloud-based/distributed environment. Its frontend graphical user interface is available both on a native desktop client and via a web interface. It is designed to minimize manual operations and the need to implement additional business logic. It adopts EGS-CC reference architecture, easing functions allocation to components and interoperability. As a check-out equipment, it uses EDEN and C&C protocol to perform integration or equipment provider's SW APIs.

OPERATING IN:

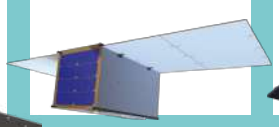
SOLAR ORBITER
ESA • ASI • MSSL

- Solar Wind Analyzer Instrument Suite Payload Data Ground Segment
- SWA DPU EGSE



ALCOR
ASI

- Earth Next
- Spy Eye
- Innovator



PLATiNO
ASI • SITAEL

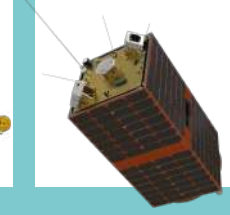
- Mission Control System
- Avionic Test Bench
- Platform EGSE

EAGLE-1
SITAEL • SES

- Mission Control
- Spacecraft Planner

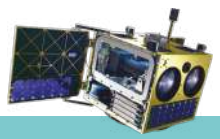
µ-HET SAT
ESA • SITAEL

- Satellite Control System for operations



HYPERSAT
CREOTECH

- Satellite Control System for operations
- Payload Control System for operations



Effediemme | Brand builders

ERMES

CONTACTS
SPACE@PLANETEK.IT

FOR FURTHER INFORMATION
HTTPS://WWW.PLANETEK.IT/ENG/ERMES

DEVELOPED BY
planetek italia