



RLT-VIKI-x - OVERVIEW

The **RLT-VIKI-x** from Réaltra Space Systems Engineering is an independent video kit for use on launch vehicles.

VIKI is a modular and scalable video telemetry system that is designed to be operated in full autonomous mode, independent of the launch vehicle on-board systems but also has options for full integration with the launcher avionics system.

FEATURES

- Modular, scalable, and flexible video telemetry system
- Full HD Video with H.265 compression and Ethernet output
- High quality optics with full range of lenses available
- Programmable video, telemetry, and timing/sequencing parameters
- Qualified for launcher and space environment operation

Applications

Launcher in-flight HD video image capture for:

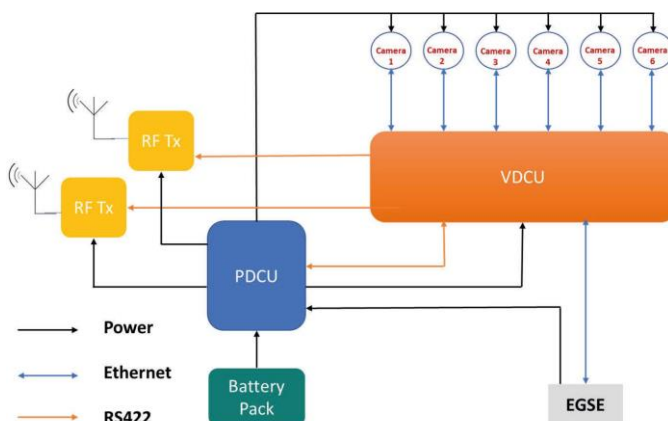
- Launcher stage & booster separation events.
- Faring and payload separation events.
- Upper stage engine firing events
- On-board technology maturation
- In-flight experiment monitoring

Re-Entry vehicle HD video image capture for;

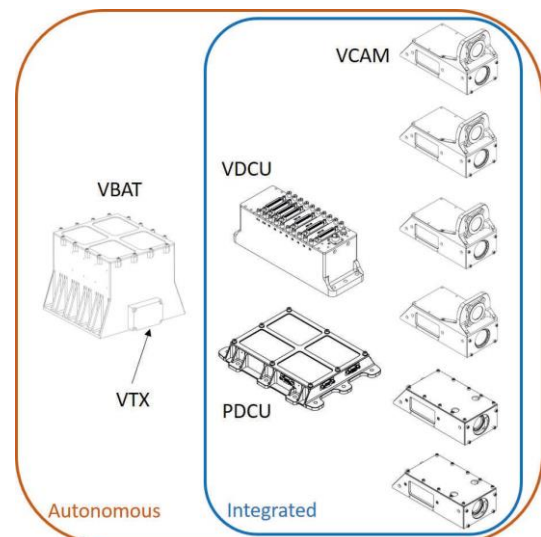
- Solar array / antenna deployment events
- On-orbit proximity operations with other spacecraft or platforms
- On-board in-flight experiment monitoring
- Re-entry preparation events



Réaltra provides the Independent Video Kit for Ariane 6



VIKI - Independent Video Kit - Architecture



VIKI – Autonomous and Integrated Versions

SPECIFICATIONS

Parameter	Value	Units	Notes
Mass			
VCAM	1.04	Kg	VIKI has 6 x VCAM. Add 235g for LED.
VDCU	2.19	Kg	VDCU with BCU, 6 modules & 3 spare slots
PDCU	1.20	Kg	Integrated and Autonomous variants
VBAT	7.69	Kg	Integrated VIKI (Add mass of 2 x VTX / Autonomous)
VTX	0.14	Kg	Autonomous VIKI has 2 x VTX units
Dimensions (LxWxH)			
VCAM	187.4 x 82.7 x 53.0	mm	187.4 x 82.7 x 107 for VCAM with LED
VDCU	243.0 x 80.0 x 97.0	mm	Excludes mating connectors
PDCU	245.0 x 192.0 x 37.8	mm	Integrated and Autonomous variants
VBAT	167.2 x 200.2 x 223.1	mm	Excludes 2 x VTX mounted on VBAT
VTX	76.2 x 50.8 x 20.3	mm	2 x VTX units are mounted on VBAT
Power Consumption			
VCAM	10.1	W	VIKI has max of 6 x VCAM. Add 2W for LED
VDCU	23.6	W	VDCU with BCU, 6 modules & 3 spare slots
PDCU	5.6	W	Integrated and Autonomous variants
VTX	45	W	Autonomous VIKI incorporates 2 x VTX units
Operating Temp	-40 to +70	oC	Qualified over this range in vacuum
Random Vibration	25	gRMS	Higher level of 31.1 gRMS for VCAM
Shock	5,000	g	Shock applied in each axis
Vacuum	1×10^{-6}	mBar	Covering full operating temperature range

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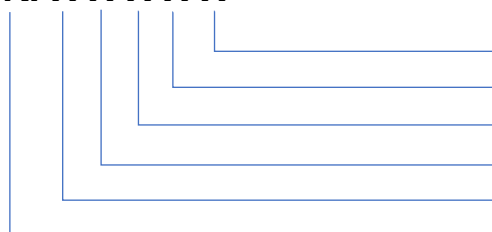
ELECTRICAL INTERFACE

The VIKI system operates from a +28VDC supply through a six-way circular connector on the side of the battery housing or directly to a 9-Way D-Type connector on the PDCU

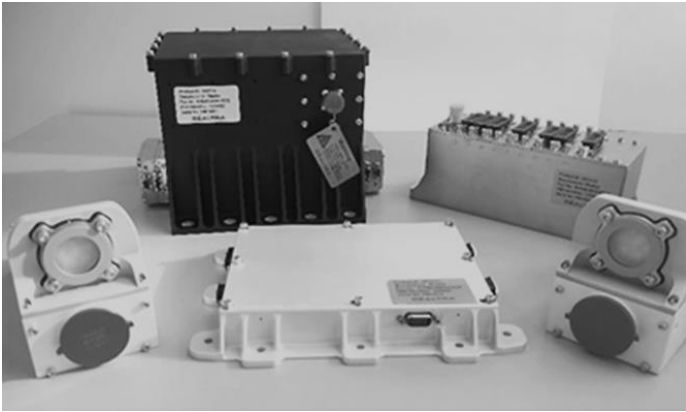
ORDERING INFORMATION

Part Number:

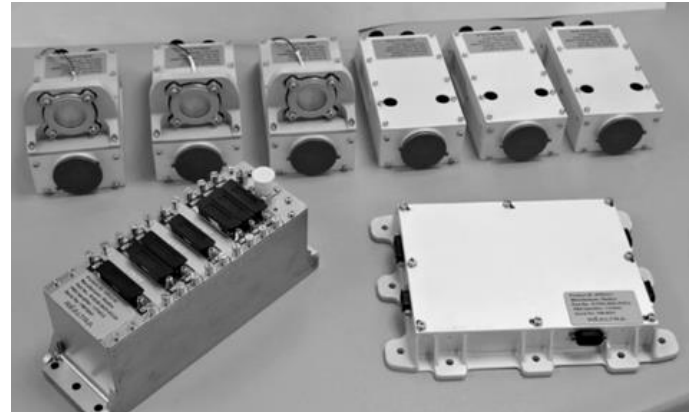
RLT-VIKI-X-X-X-X-X



- E: Engineering Model / F: Flight Model
- Number of Cameras with LED (Max = 6 – No. of Cameras without LED)
- Number of Cameras without LED (Max = 6)
- No. of Battery Modules in VBAT (1, 2 or 3) (Autonomous Only)
- Autonomous (AUT) or Integrated (INT) Versions
- Independent Video Kit Family



VIKI - Autonomous Independent Video Kit for use on the Ariane 5 launch vehicle



VIKI – Integrated Independent Video Kit for use on the Ariane 6 launch vehicle

The Video Kit developed by Réaltra Space Systems Engineering has been Qualified for the flight elements of the Independent HD Video Telemetry Kit (VIKI) for use on the Ariane 5 and Ariane 6 launch vehicles for ArianeGroup. The VIKI system will capture and broadcast HD video from HD IP cameras located on the launchers that will provide live images of the stage, fairing and payload separation events for commercial and engineering purposes.

To make an enquiry, request a quotation or learn about Réaltra’s other products and services, please contact:



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Note: “Ariane 5” and “Ariane 6” are Trademarks owned by ArianeGroup SAS.

Note: Information in this document is subject to change without notice and becomes contractual only after written confirmation by Réaltra Space Systems Engineering.