

On-board modules

TV Module TV918

Basic technical specifications



TV Module:

- image standard	PAL
- matrix	1/4" EXview HAD CCD
- lens focal distance	4.2 mm (W) ~ 42.0 mm (T)
- wide field of view	46.0°(H)
- narrow field of view	4.6°(H)
- image definition	530 tvl
- number of effective pixels	~ 440,000
- minimum light intensity	1.0 lx
- magnification	120× (10× optical, 12× digital)
- zoom control	automatic
Suspension arrangement	two-axis, gyro-stabilized
- camera turning rate	100°/s
- camera turning angle in vertical plane	+20...-110°
- camera turning angle in horizontal plane	±175°
- stabilization level	500 μrad
Operating temperature range	-30°C ... +40°C
Overall dimensions	120×120×132 mm
Weight, no more than	700 g
Power consumption, no more than	
- average	5 W
- maximum	25 W
Permissible operating overload	50 g
UAV carrier	ELERON-3SV family; ELERON-10SV family

Ball diameter 90 mm / Two-axis suspension arrangement

TV Module TV923

Basic technical specifications



TV Module:

- image standard	PAL
- matrix	1/3" CMOS
- lens focal distance	3.3 mm (W) ~ 33.0 mm (T)
- wide field of view	58.2°(H)
- narrow field of view	6.9°(H)
- image definition	1080p HD
- number of effective pixels	~ 4,080,000
- minimum light intensity	0.5 lx
- optical magnification	10×
- zoom control	automatic
Suspension arrangement	two-axis, gyro-stabilized
- camera turning rate	100°/s
- camera turning angle in vertical plane	+20...-110°
- camera turning angle in horizontal plane	±175°
- stabilization level	500 μrad
Operating temperature range	-30°C ... +40°C
Overall dimensions	120×120×132 mm
Weight, no more than	700 g
Power consumption, no more than	
- average	5 W
- maximum	25 W
Permissible operating overload	50 g
UAV carrier	ELERON-3SV family; ELERON-10SV family

Ball diameter 90 mm / Two-axis suspension arrangement

Combined module TV924-1

Basic technical specifications



Ball diameter 90 mm / Two-axis suspension arrangement

Infrared Module:	
- image standard	PAL
- lens focal distance	35 mm
- field of view	18°(H)×14°(V)
- image definition	640×512
- angular resolution	0.496 mrad
- image update frequency	50 Hz
- spectral band	7.5-13.5 μm
- thermal sensitivity	<50 mK
- digital magnification	2x and 4x
- human activity detection limit	up to 1,150 m
Color TV Module:	
- image standard	PAL
- matrix	1/4" CMOS
- lens focal distance	6 mm
- field of view	33.2°(H)×25.2°(V)
- image definition	625 tvl
- number of effective pixels	640(H)×480(V)
- minimum light intensity	0.05 lx
Black-and-white TV Module:	
- image standard	PAL
- matrix	1/4" CMOS
- lens focal distance	12 mm
- field of view	17°(H)×12.8°(V)
- image definition	625 tvl
- number of effective pixels	640(H)×480(V)
- minimum light intensity	0.03 lx
Suspension arrangement	two-axis, gyro-stabilized
- camera turning rate	100°/s
- camera turning angle in vertical plane	+20...-110°
- camera turning angle in horizontal plane	±175°
- stabilization level	500 μrad
Operating temperature range	-30°C ... +40°C
Overall dimensions	120×120×132 mm
Weight, no more than	700 g
Power consumption, no more than	
- average	5 W
- maximum	25 W
Permissible operating overload	50 g
UAV carrier	ELERON-3SV family; ELERON-10SV family

TV Module M001

Basic technical specifications



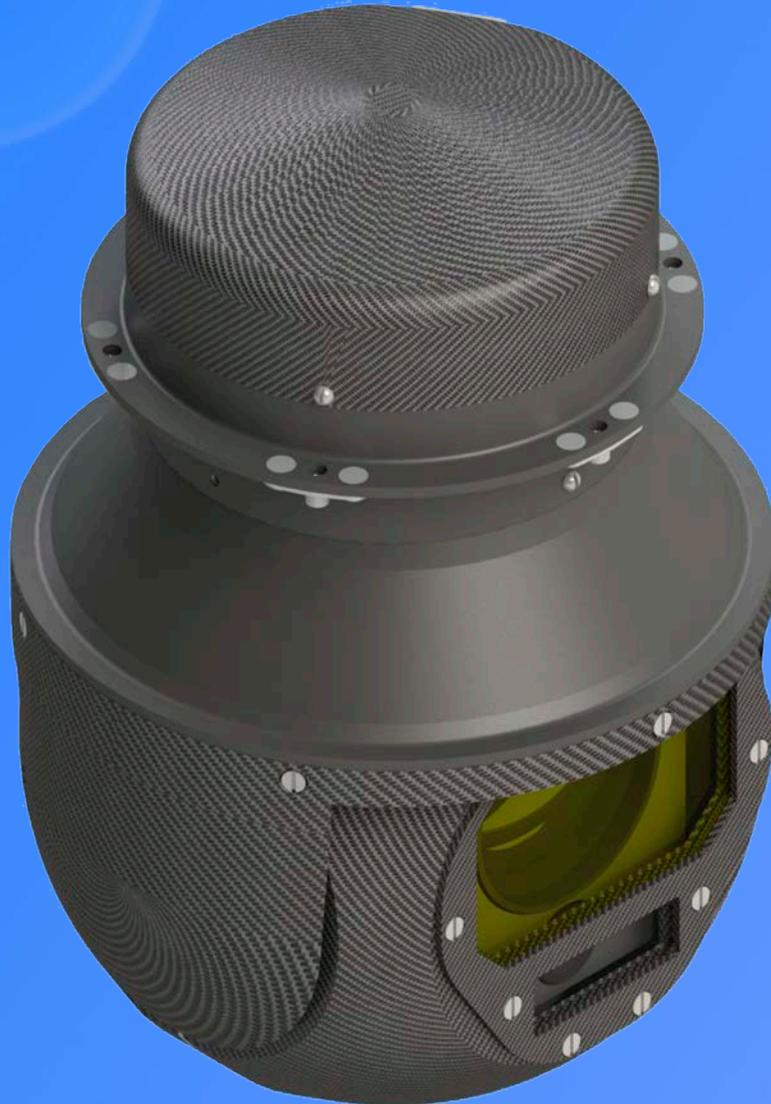
TV Module:

- image standard	PAL
- matrix	1/4" EXview HAD CCD
- wide field of view	57.8°(H)
- narrow field of view	1.7°(H)
- image definition	540 tvl
- number of effective pixels	~ 440,000
- minimum light intensity	1.4 lx
- optical magnification	36×
- zoom control	automatic
Suspension arrangement	three-axis, gyro-stabilized
- camera turning rate	100°/s
- camera turning angle in vertical plane	+20...-160°
- camera turning angle in horizontal plane	not limited
- stabilization level	250 μrad
Operating temperature range	-30°C ... +40°C
Overall dimensions	123×123×183 mm
Weight, no more than	1,350 g
Power consumption, no more than	
- average	10 W
- maximum	60 W
Permissible operating overload	50 g
UAV carrier	ELERON-10SV family

Ball diameter 120 mm / Three-axis suspension arrangement

Combined module M002

Basic technical specifications



Infrared Module:	
- image standard	PAL
- lens focal distance	35 mm
- field of view	18°(H)×14°(V)
- image definition	640×512
- angular resolution	0.496 mrad
- image update frequency	50 Hz
- spectral band	7.5-13.5 μm
- thermal sensitivity	<50 mK
- digital magnification	2× and 4×
- human activity detection limit	up to 1,150 m
Color TV module:	
- image standard	PAL
- matrix	1/4" CMOS
- lens focal distance	12 mm
- field of view	17°(H)×12.8°(V)
- image definition	625 tvl
- number of effective pixels	640(H)×480(V)
- minimum light intensity	0.05 lx
Suspension arrangement	three-axis, gyro-stabilized
- camera turning rate	100°/s
- camera turning angle in vertical plane	+20...-160°
- camera turning angle in horizontal plane	not limited
- stabilization level	250 μrad
Operating temperature range	-30°C ... +40°C
Overall dimensions	123×123×183 mm
Weight, no more than	1,350 g
Power consumption, no more than	
- average	10 W
- maximum	60 W
Permissible operating overload	50 g
UAV carrier	ELERON-10SV family

Ball diameter 120 mm / Three-axis suspension arrangement