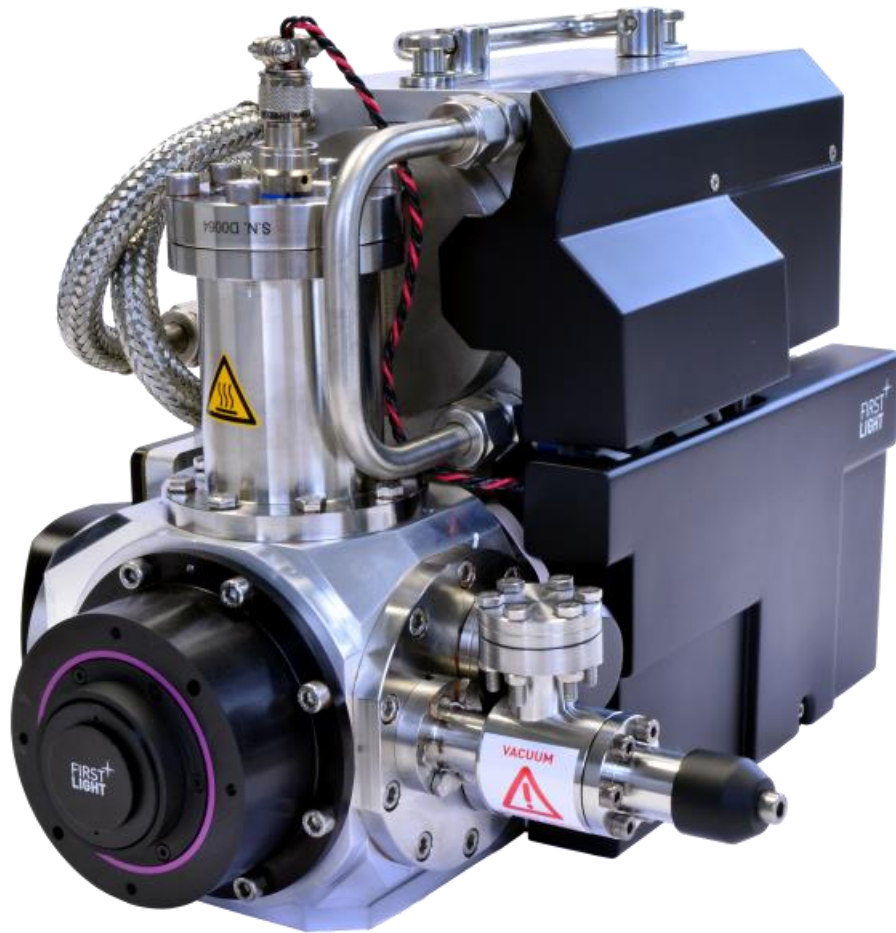


C-RED One

Features Reference

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1. CameraStatus

1.1. MotherBoard

MotherBoard temperature (°C).

Feature	Value
Display Name	MotherBoard (°C)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.2. FrontEnd

FrontEnd temperature (°C).

Feature	Value
Display Name	FrontEnd (°C)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.3. PowerBoard

PowerBoard temperature (°C).

Feature	Value
Display Name	PowerBoard (°C)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.4. CryoD

CryoD temperature (K).

Feature	Value
Display Name	CryoD (K)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.5. CryoPT

CryoPT temperature (K).

Feature	Value
Display Name	CryoPT (K)
Feature type	Float
Access	RO
Visibility	Beginner
Category	CameraStatus

1.6. Water

Water temperature (°C).

Feature	Value
Display Name	Water (°C)
Feature type	Float
Access	RO
Visibility	Beginner
Category	CameraStatus

1.7. Peltier

Peltier temperature (°C).

Feature	Value
Display Name	Peltier (°C)
Feature type	Float
Access	RO
Visibility	Beginner
Category	CameraStatus

1.8. PulseTube

PulseTube temperature (°C).

Feature	Value
Display Name	PulseTube (°C)
Feature type	Float
Access	RO
Visibility	Beginner
Category	CameraStatus

1.9. V48

V48 (V).

Feature	Value
Display Name	V48 (V)
Feature type	Float
Access	RO

Visibility	Expert
Category	CameraStatus

1.10. GetterPower

Getter power (W).

Feature	Value
Display Name	Getter power (W)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.11. PeltierPower

Peltier power (W).

Feature	Value
Display Name	Peltier power (W)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.12. PTPower

Pulse tube power (W).

Feature	Value
Display Name	PT power (W)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.13. VacuumPressure

Vacuum pressure (mBar).

Feature	Value
Display Name	Vacuum (mBar)
Feature type	String
Access	RO
Visibility	Expert
Category	CameraStatus

1.14. PhotoCurrent

PhotoCurrent (nA).

Feature	Value
Display Name	PhotoCurrent (nA)
Feature type	Float
Access	RO
Visibility	Expert
Category	CameraStatus

1.15. Status

Status of the camera.

Feature	Value
Display Name	Status
Feature type	String
Access	RO
Visibility	Beginner
Category	CameraStatus

1.16. PTReady

Pulse tube ready.

Feature	Value
Display Name	PT ready
Feature type	String
Access	RO
Visibility	Beginner
Category	CameraStatus

1.17. CoolingStatus

Cooling status.

Feature	Value
Display Name	Cooling status
Feature type	String
Access	RO
Visibility	Beginner
Category	CameraStatus

1.18. RegenRemainingTime

Remaining time for regeneration.

Feature	Value
Display Name	Remaining time regen

Feature type	String
Access	RO
Visibility	Beginner
Category	CameraStatus

2. Common

2.1. Framerate

Device framerate in Hz.

Feature	Value
Display Name	Framerate
Feature type	Float
Access	RW
Visibility	Beginner
Unit	Hz
Category	Common

2.2. ResetWidthStep

Reset Width Step.

Feature	Value
Display Name	Reset Width Step
Feature type	Integer
Access	RW
Visibility	Expert
Category	Common

2.3. Standby

Standby state.

Feature	Value
Display Name	Standby
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	Common

2.4. Cropping

Category for cropping.

2.4.1. CroppingColumns

Cropping columns.

Feature	Value
Display Name	Columns
Feature type	String
Access	RW
Visibility	Beginner
Category	Cropping

2.4.2.CroppingRows

Cropping rows.

Feature	Value
Display Name	Rows
Feature type	String
Access	RW
Visibility	Beginner
Category	Cropping

2.4.3.CroppingEnable

Enable/disable cropping.

Feature	Value
Display Name	Enable
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	Cropping

2.4.4.CroppingSend

Send cropping conf.

Feature	Value
Display Name	Apply conf
Feature type	Command
Access	WO
Visibility	Beginner
Category	Cropping

2.5. RegenGetter

execute the getter regeneration

Feature	Value
Display Name	Getter Regeneration
Feature type	Command
Access	WO
Visibility	Guru

Category	Common
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3. ImageEnhancement

3.1. BuildBias

Start build bias.

Feature	Value
Display Name	Build bias
Feature type	Command
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.2. ApplyBias

Enable/disable bias.

Feature	Value
Display Name	Apply Bias
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.3. BuildFlat

Start build flat.

Feature	Value
Display Name	Build flat
Feature type	Command
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.4. ApplyFlat

Enable/disable flat.

Feature	Value
Display Name	Apply Flat
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.5. Gain

Device gain.

Feature	Value
Display Name	Gain
Feature type	Integer
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.6. OverIlluminationAcknowledge

Acknowledge Over Illumination.

Feature	Value
Display Name	Acknowledge Over Illumination
Feature type	Command
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.7. ReadoutMode

Change the readout mode.

Feature	Value
Display Name	Readout mode
Feature type	Enumeration
Access	RW
Visibility	Beginner
Category	ImageEnhancement

Possible values	Description
<i>Global reset single</i>	
<i>Global reset CDS</i>	
<i>Global reset N readout</i>	
<i>Rolling reset single</i>	
<i>Rolling reset N readout</i>	
<i>Rolling reset IOTA</i>	

3.8. ExternalSynchro

Enable/disable external synchro.

Feature	Value
Display Name	External synchro
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.9. RawImages

Enable/disable raw images.

Feature	Value
Display Name	Raw images
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.10. FollowUpTheRamp

Enable/disable SDK follow up the ramp calculation. Value of each pixels must be multiplied by 1/ FPS.

Feature	Value
Display Name	Follow up the ramp
Feature type	Boolean
Access	WO
Visibility	Guru
Category	ImageEnhancement

3.11. Fowler

Enable/disable fowler.

Feature	Value
Display Name	Fowler
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.12. FowlerProcessing

Enable/disable SDK fowler calculation.

Feature	Value
Display Name	Fowler processing
Feature type	Boolean
Access	WO
Visibility	Guru
Category	ImageEnhancement

3.13. FowlerOffset

Change fowler offset.

Feature	Value
Display Name	Fowler offset
Feature type	Integer
Access	WO
Visibility	Guru
Category	ImageEnhancement

3.14. NSampledPixels

Nb of sample pixels.

Feature	Value
Display Name	Nb sample pixels
Feature type	Integer
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.15. NLoops

Nb loops.

Feature	Value
Display Name	Nb loops
Feature type	Integer
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.16. NFramesWoReset

Nb frames without reset.

Feature	Value
Display Name	Nb frames wo reset
Feature type	Integer
Access	RW
Visibility	Beginner
Category	ImageEnhancement

3.17. TestPattern

Enable/disable test pattern.

Feature	Value
Display Name	Test pattern
Feature type	Boolean
Access	RW

Visibility	Beginner
Category	ImageEnhancement

3.18. PhaseShift

Change the phase shift.

Feature	Value
Display Name	Phase shift
Feature type	Float
Access	RW
Visibility	Guru
Category	ImageEnhancement

3.19. AduOffset

This register allows to add a constant offset to the pixel values sent by the camera.

Feature	Value
Display Name	ADU offset
Feature type	Integer
Access	RW
Visibility	Guru
Category	ImageEnhancement

4. Cooling

4.1. TargetTemperature

Sensor temperature setpoint.

Feature	Value
Display Name	Setpoint
Feature type	Float
Access	RW
Visibility	Beginner
Unit	K
Category	Cooling

4.2. EnableCooling

Enable/disable cooling.

Feature	Value
Display Name	Enable
Feature type	Boolean
Access	RW
Visibility	Beginner
Category	Cooling

5. Information

5.1. CameraType

Type of the camera.

Feature	Value
Display Name	Camera Type
Feature type	String
Access	RO
Visibility	Expert
Category	Information

5.2. Hwuid

Hardware UID of the camera.

Feature	Value
Display Name	Hardware UID
Feature type	String
Access	RO
Visibility	Expert
Category	Information

5.3. FirmwareVersion

Firmware version of the camera.

Feature	Value
Display Name	Firmware version
Feature type	String
Access	RO
Visibility	Beginner
Category	Information

5.4. FpgaVersion

FPGA version of the camera.

Feature	Value
Display Name	FPGA version
Feature type	String
Access	RO
Visibility	Beginner
Category	Information

5.5. HardwareVersion

Hardware version of the camera.

Feature	Value
Display Name	Hardware version
Feature type	String
Access	RO
Visibility	Beginner
Category	Information

6. SendFiles

6.1. SerialLink

6.1.1.SendFilesBias

Feature	Value
Display Name	Bias
Feature type	String
Access	WO
Visibility	Expert
Category	SerialLink

6.1.2.SendFilesFlat

Feature	Value
Display Name	Flat
Feature type	String
Access	WO
Visibility	Expert
Category	SerialLink

6.2. Tcp_Ip

6.2.1.TcpIpBias

Feature	Value
Display Name	Bias
Feature type	String
Access	WO
Visibility	Expert
Category	Tcp_Ip

6.2.2.TcpIpFlat

Feature	Value
Display Name	Flat
Feature type	String
Access	WO
Visibility	Expert

Category	Tcp_Ip
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6.2.3.TcpIpTestPattern

Feature	Value
Display Name	Test Pattern
Feature type	String
Access	WO
Visibility	Expert
Category	Tcp_Ip

7. PowerManagement

7.1. Shutdown

Shutdown camera.

Feature	Value
Display Name	Shutdown
Feature type	Command
Access	WO
Visibility	Beginner
Category	PowerManagement

7.2. Reboot

reboot camera.

Feature	Value
Display Name	Reboot
Feature type	Command
Access	WO
Visibility	Beginner
Category	PowerManagement

7.3. Continue

Continue boot after a "Safe" status.

Feature	Value
Display Name	Continue boot
Feature type	Command
Access	WO
Visibility	Beginner
Category	PowerManagement

8. Settings

8.1. SaveSettings

Save all the camera settings into the camera

Feature	Value
Display Name	Save camera settings
Feature type	Command
Access	WO
Visibility	Guru
Category	Settings

8.2. RestoreFactorySettings

Restore all the camera Factory settings into the camera

Feature	Value
Display Name	Restore camera Factory settings
Feature type	Command
Access	WO
Visibility	Guru
Category	Settings