

OSVP Clip documentation

Introduction

The OSVP Clip (clip) is a collection of metadata parameters sampled over a specified duration. Each parameter is either:

- static: the parameter has at constant value over the duration of the clip
- dynamic: the parameter is sampled at regular intervals over the duration of the clip

Each parameter is identified by a unique name. It also has a general description as well as a specific set of constraints.

Parameters

active_sensor_physical_dimensions

Description

Height and width, in microns, of the active area of the camera sensor

Sampling

Static

Constraints

The height and width shall be each be an integer in the range [0..2,147,483,647].

active_sensor_pixel_dimensions

Description

Height and width, in pixels, of the active area of the camera sensor

Sampling

Static

Constraints

The height and width shall be each be an integer in the range [0..2,147,483,647].

duration

Description

Duration of the clip in seconds

Sampling

Static

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

entrance_pupil_position

Description

Entrance pupil of the lens in millimeters

Sampling

Regular

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

focal_length

Description

Focal length of the lens in millimeter

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

focal_position

Description

Focus distance/position of the lens millimeters

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

fps

Description

Capture frame frate of the camera in frames per second (fps)

Sampling

Static

Constraints

The parameter shall be a rational number whose numerator and denominator are in the range (0..2,147,483,647].

iso

Description

Arithmetic ISO scale as defined in ISO 12232

Sampling

Static

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

lens_serial_number

Description

Unique identifier of the lens

Sampling

Static

Constraints

The parameter shall be a Unicode string betwee 0 and 1023 codepoints.

t_number

Description

Thousandths of the t-number of the lens

Sampling

Regular

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

white_balance

Description

White balance of the camera expressed in degrees kelvin.

Sampling

Static

Constraints

The parameter shall be a integer in the range (0..2,147,483,647].

JSON Schema

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"$schema": "https://json-schema.org/draft/2020-12/schema",
"type": "object",
"properties": {},
"active_sensor_physical_dimensions": {
  "type": "object",
  "additionalProperties": false,
  "required": [
    "height",
    "width"
  ],
  "properties": {
    "height": {
      "type": "integer",
      "minimum": 0,
      "maximum": 2147483647
    },
    "width": {
      "type": "integer",
      "minimum": 0,
      "maximum": 2147483647
    }
  }
},
"active_sensor_pixel_dimensions": {
  "type": "object",
  "additionalProperties": false,
  "required": [
    "height",
    "width"
  ],
  "properties": {
    "height": {
      "type": "integer",
```

```
    "minimum": 0,
    "maximum": 2147483647
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  "width": {
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    "minimum": 0,
    "maximum": 2147483647
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},
"duration": {
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  "regex": "[0-9]{1,10}/[0-9]{1,10}"
},
"entrance_pupil_position": {
  "type": "array",
  "items": {
    "type": "string",
    "regex": "[0-9]{1,10}/[0-9]{1,10}"
  }
},
"focal_length": {
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  "items": {
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    "minimum": 1,
    "maximum": 2147483647
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"focal_position": {
  "type": "array",
  "items": {
    "type": "integer",
    "minimum": 1,
    "maximum": 2147483647
  }
},
"fps": {
  "type": "string",
  "regex": "[0-9]{1,10}/[0-9]{1,10}"
},
"iso": {
  "type": "integer",
  "minimum": 1,
  "maximum": 2147483647
},
"lens_serial_number": {
  "type": "string",
  "minLength": 1,
  "maxLength": 1023
},
"t_number": {
  "type": "array",
  "items": {
    "type": "integer",
    "minimum": 1,
    "maximum": 2147483647
  }
}
```

```
    }  
  },  
  "white_balance": {  
    "type": "integer",  
    "minimum": 1,  
    "maximum": 2147483647  
  }  
}'''
```