

# OSVP Clip documentation

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## Introduction

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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

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### **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",
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  "required": [
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  "properties": {
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      "minimum": 0,
      "maximum": 2147483647
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    "width": {
      "type": "integer",
      "minimum": 0,
      "maximum": 2147483647
    }
  }
},
"active_sensor_pixel_dimensions": {
  "type": "object",
  "additionalProperties": false,
  "required": [
    "height",
    "width"
  ],
  "properties": {
    "height": {
      "type": "integer",
```

```
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    "maximum": 2147483647
  },
  "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}"
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"entrance_pupil_position": {
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  "items": {
    "type": "string",
    "regex": "[0-9]{1,10}/[0-9]{1,10}"
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"focal_length": {
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  "items": {
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    "minimum": 1,
    "maximum": 2147483647
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"focal_position": {
  "type": "array",
  "items": {
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    "minimum": 1,
    "maximum": 2147483647
  }
},
"fps": {
  "type": "string",
  "regex": "[0-9]{1,10}/[0-9]{1,10}"
},
"iso": {
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  "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  
  }  
}
```