

# Converting Colors

XYZ(20.2118, 8.9379, 67.8850)

Have a look what the booklet for  
XYZ(20.2118, 8.9379, 67.8850)  
contains.

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# Color

**XYZ(20.1223, 8.8964,  
67.6744)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	7500DB
RGB	117, 0, 219
RGB Percent	46%, 0%, 86%
CMY	0.5412, 1.0000, 0.1412
CMYK	0.47, 1.00, 0.00, 0.14
HSL	272°, 100%, 43%
HSV	272°, 100%, 86%
XYZ	20.1223, 8.8964, 67.6744
YIQ	59.9490, -0.5670, 92.9130

# Conversions

## Conversions Part 2

<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	117, 0, 219
Decimal	7667931
CIE Lab	35.78, 74.79, -81.40
CIE LCh	36, 110.542, 312.579
Yxy	8.8964, 0.2081, 0.0920
Android (android.graphics.Color)	4285858011 (0xFF7500DB)
YUV	59.9490, 78.4121, 50.0337
Hunter-Lab	29.8268, 68.2258, -113.6449

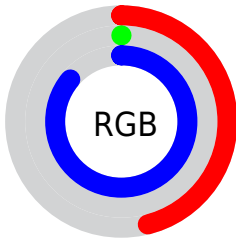
# Details

The XYZ color **20.1223, 8.8964, 67.6744** is a dark color, and the websafe version is hex **6600CC**.

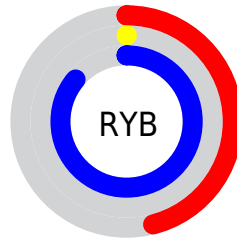
The color can be described as dark washed purple. A complement of this color would be **30.8106, 53.4877, 8.7003**, and the grayscale version is **4.1832, 4.4011, 4.7928**.

A 20% lighter version of the original color is **39.1345, 22.1338, 96.8174**, and **7.7882, 3.2616, 34.4015** is the 20% darker color. If you saturate the color by 10%, you get **20.1230, 8.8967, 67.6747**, and if you desaturate by 10%, it is **21.8541, 10.2122, 67.8373**.

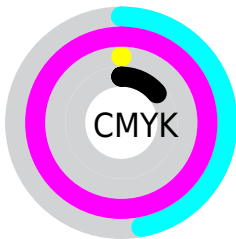
# Distribution



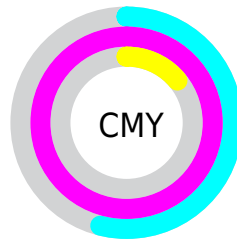
- Red (46%)
- Green (0%)
- Blue (86%)



- Red (46%)
- Yellow (0%)
- Blue (86%)



- Cyan (47%)
- Magenta (100%)
- Yellow (0%)
- Black (14%)



- Cyan (54%)
- Magenta (100%)
- Yellow (14%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 20.1223, 8.8964, 67.6744 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the XYZ color 20.1223, 8.8964, 67.6744 by changing the saturation by 10% instead.



20.1223, 8.8964,  
67.6744

20.1223, 8.8964,  
67.6744

245.3974,  
182.6031, 470.9082

12.5928, 4.6737,  
49.1679

43.1245, 23.6979,  
117.5360

7.2238, 2.0571,  
34.3861

59.3279, 35.0455,  
149.7282

3.6500, 0.6403,  
22.9106

79.1533, 49.5368,  
187.3193

1.5061, 0.0000,  
14.3228

102.9660, 67.5562,  
230.7280

0.3300, 0.0000,  
8.2042

131.1314, 89.4882,  
280.3726


0.0000, 0.0000,  
4.1363


164.0149,


0.0000, 0.0000,


115.7171, 336.6719

1.7004


 201.9817,  
146.6272, 400.0442


 0.0000, 0.0000,  
0.3610


 0.0000, 0.0000,  
0.0000


 20.1223, 8.8964,  
67.6744


 20.1223, 8.8964,  
67.6744

 20.1230, 8.8967,  
67.6747

 21.8541, 10.2122,  
67.8373

 24.0623, 12.2535,  
68.1150

 26.8581, 15.2349,  
68.5431

 30.3050, 19.2776,  
69.1417

■ 34.4573, 24.4839,  
69.9278

■ 39.3629, 30.9437,  
70.9161

■ 45.0648, 38.7378,  
72.1200

■ 51.6027, 47.9401,  
73.5516

■ 59.0134, 58.6188,  
75.2223

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



11.4974, 8.8964, 104.3293



20.1223, 8.8964, 67.6744



26.9987, 8.8964, 24.9455

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



20.1223, 8.8964, 67.6744



12.8024, 8.8964, 0.0000



1.1661, 8.8964, 19.8248

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



20.1223, 8.8964, 67.6744



30.8106, 53.4877, 8.7003

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



1.2409, 8.8964, 2.4142



20.1223, 8.8964, 67.6744



6.0043, 8.8964, 0.0000

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



20.1223, 8.8964, 67.6744



21.4902, 8.8964, 0.0000



2.4857, 8.8964, 0.0000



2.1684, 8.8964, 60.1179



# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



20.1223, 8.8964, 67.6744



28.2393, 8.8964, 8.1565



2.4857, 8.8964, 0.0000



1.0907, 8.8964, 11.3972

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



20.1230, 8.8967, 67.6747



63.3954, 54.3779, 101.7624



17.5573, 14.6566, 68.9217



12.8091, 10.5915, 21.6192



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



20.1230, 8.8967, 67.6747



28.2420, 12.4742, 95.5270



41.0594, 19.7985, 63.7467



12.9997, 12.9580, 16.4681



12.0596, 5.3411, 40.1337



0.8804, 0.3971, 2.6047



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



31.6116, 16.0193, 13.9952



44.5555, 22.5862, 19.3892



25.3716, 50.6792, 8.6545



13.3071, 13.1519, 14.8785



18.7983, 9.5204, 8.5840



1.2611, 0.6341, 0.7839



# Previews

## White Background



This preview shows how the XYZ color 20.1223, 8.8964, 67.6744 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass



# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

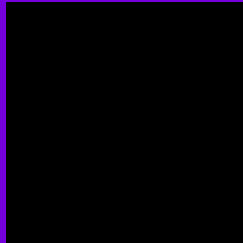
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 20.1223, 8.8964, 67.6744**

## **Background**



This preview shows how black text looks on a background with the XYZ color 20.1223, 8.8964, 67.6744.



This preview shows how white text looks on a background with the XYZ color 20.1223, 8.8964,



# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

20.1223, 8.8964, 67.6744

### Protanopia

10.8311, 9.2817, 41.7781

### Deuteranopia

9.0774, 9.3468, 30.1798



## Tritanopia

8.9266, 9.2010, 11.4307

# Trichromacy



## Original Color

20.1223, 8.8964, 67.6744

## Protanomaly

11.6733, 6.8214, 49.9916

## Deuteranomaly

10.1973, 6.5350, 41.2814

## Tritanomaly

10.8364, 7.0147, 24.8276

# Monochromacy



## Original Color

20.1223, 8.8964, 67.6744

## Achromatopsia

4.2949, 4.5186, 4.9208

## Achromatomaly

7.3565, 4.4436, 17.6095

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 20.1223, 8.8964, 67.6744 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(117, 0, 219)` looks like.

```
.text, #text, p{  
    color:rgb(117, 0, 219)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(117, 0, 219) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(117, 0, 219) }
```

## Border

The CSS property to change the border of an element to XYZ 20.1223, 8.8964, 67.6744 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(117, 0, 219) }
```



If only the border color should be changed use the property border-color.

```
.border{ border-color:rgb(117, 0, 219) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel rgb(117, 0, 219) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(117, 0, 219); -webkit-box-  
shadow:4px 4px 4px 4px rgb(117, 0, 219);  
box-shadow:4px 4px 4px 4px rgb(117, 0,  
219) }
```

# Background

The CSS property to change the background color of an element to XYZ 20.1223, 8.8964, 67.6744 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(117, 0, 219) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(117, 0,  
219) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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