

■Introduction

This article explains the effect of ambient temperature change on the captured image quality, the cause of the phenomenon with the characteristics of lens, and the countermeasure to improve the image quality.

■Applicable models

Network cameras with Auto Back Focus (ABF) or Auto Focus (AF) function

■Lens characteristics

Although images with good image quality can be obtained at ambient temperatures ranging from 20 to 30°C, the image quality may deteriorate when a large change in temperature occurs even within the operating temperature range.

■Corresponding method

By performing AF or ABF, the images will be improved from the ones that has deteriorated due to a change in temperature.

Note: We recommend performing AF or ABF at ambient temperature ranging from 20 to 30°C especially in the environment where the temperature is changeable such as outdoors.

Ambient Temperature Effects on Camera Images

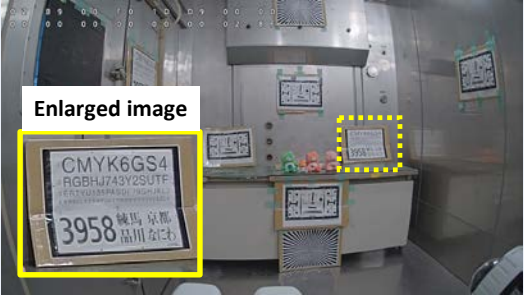
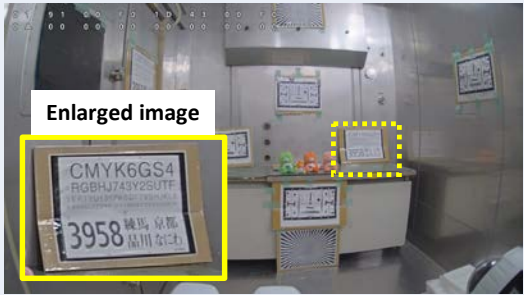
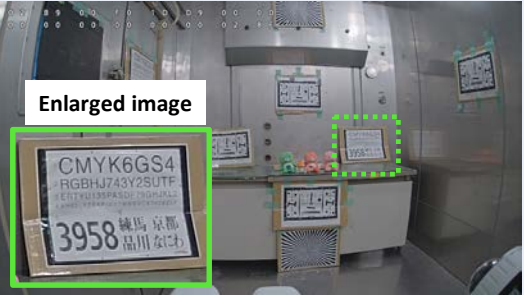
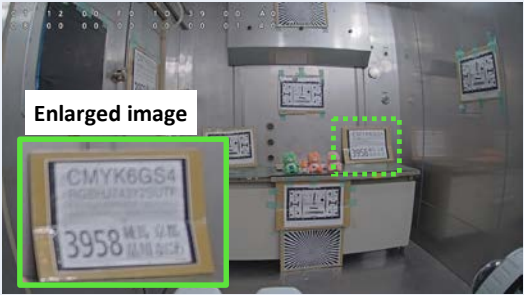
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- The below are sample cases where image quality changes due to the temperature changes. The image quality can deteriorate if there is a large change in temperature after the camera installation.
Note: Re-adjust the focus using AF or ABF when image quality looks deteriorated as below Sample case#2.
We recommend performing focus re-adjustment at ambient temperature ranging from 20 to 30°C .

The range of temperature for this test:
-30 °C to +60 °C

Sample case#1

Normal operation

■ Installed under 25 °C environment and performed AF		-30 °C (image quality = Good)	
	Drops 55 °C in temperature		
■ Installed under 60 °C environment and performed AF		-30 °C (Image quality = Poor)	
	Drops 90 °C in temperature		

Sample case#2

Operation when a large change in temperature occurs