APTER■POWER

PRODUCT TECHNICAL REFERENCE

INDUSTRIAL AUTOMATION PRODUCT

CV-X420F

2-Megapixel Camera Vision-System Controller

KEYENCE CV-X420F is a CV-X vision-system controller supporting two-megapixel cameras. It processes acquired images and communicates inspection results to the production-control system.

IDENTITY	VERIFIED VALUE
Manufacturer	KEYENCE
System family	KEYENCE CV-X machine vision system
Part number	CV-X420F
Country	Japan
HS code	8537101190

APTER POWER SALES TEAM

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2 Technical Specifications

Technical values below are limited to the named KEYENCE product record.

PARAMETER	TECHNICAL VALUE
Controller type	Vision-system controller
Supported camera class	2 megapixel
Series	CV-X

ENGINEERING DATA SUMMARY

DATA GROUP	VERIFIED ASSIGNMENT
Installed host / carrier	supported KEYENCE camera
Companion hardware	camera cable and lens
Field connection	inspection lighting and controller
Primary system function	Processes images from supported two-megapixel industrial cameras
Controlled acceptance duty	Presence and assembly verification

3 System Role and Architecture

KEYENCE CV-X420F is a CV-X vision-system controller supporting two-megapixel cameras. It processes acquired images and communicates inspection results to the production-control system.

FUNCTION 1

Processes images from supported two-megapixel industrial cameras

FUNCTION 2

Executes configured inspection and measurement tools

FUNCTION 3

Coordinates triggers, lighting, result outputs, and image storage

FUNCTION 4

Provides the operator and network interfaces for an inline vision station

Matched system components

- supported KEYENCE camera
- camera cable and lens
- inspection lighting and controller
- trigger sensor and machine I/O

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	supported KEYENCE camera
Companion hardware	camera cable and lens
Field connection	inspection lighting and controller
Primary system function	Processes images from supported two-megapixel industrial cameras
Controlled acceptance duty	Presence and assembly verification

4 Applications and Engineering Context

Presence and assembly verification

Processes images from supported two-megapixel industrial cameras

Dimensional vision measurement

Executes configured inspection and measurement tools

Code and character inspection

Coordinates triggers, lighting, result outputs, and image storage

Automated defect detection

Provides the operator and network interfaces for an inline vision station

TECHNICAL NOTE

Back up the CV-X420F program, preserve camera-port and I/O assignments, and validate trigger timing, image focus, inspection thresholds, and result-handshake behavior before production release.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	CV-X420F / CV-X420F recorded
Physical interface	supported KEYENCE camera
Companion check	camera cable and lens
Functional proof	Processes images from supported two-megapixel industrial cameras
Application test	Presence and assembly verification

5 Engineering Precautions

1. Verify CV-X420F and the saved inspection program before replacement.
2. Isolate controller and lighting power before cable changes.
3. Label every camera, trigger, illumination, network, and result-I/O connection.
4. Protect camera connectors and observe ESD controls.
5. Restore the exact camera model, lens, lighting, and calibration files.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
GT2-H32	High-accuracy digital contact sensor head	**Open product page**

MANUFACTURER SOURCE RECORD

KEYENCE CV-X420F Model Page

CV-X420F

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