

VisionNavi

Machine Vision Edge Solution Ready Platform



Features

- Intuitive GUI without programming skills
- Flexible licensing options including full, ID, alignment
- Supports up to six GigE vision cameras with up to 20M resolution in mono and bayer formats
- Supports conditional operator, external API for advanced applications

Introduction

Advantech VisionNavi is a configurable GUI-based machine vision application software that facilitates developing and deploying machine vision applications without any programming skills.

Flowchart and video instructions help lower your learning curve by following four simple steps in image capture, processing, conditional operators, and output results used to accomplish tasks. With its powerful alignment, gauging, inspection, and identification toolkits, VisionNavi supports a wide range of machine vision applications on the factory floor.

Customers can define criteria for object classification or output data to standard communication protocol devices like position sensors, PLCs, and robots to meet Industry 4.0 requirements. Using APIs and VisionNavi, customized apps can be integrated with motion control and production systems. VisionNavi is designed with an open architecture, it supports standard x86 platforms and most popular GigE Vision cameras.

Specifications

Description	Advanced level Machine Vision Application SW			Entry level Machine Vision Application SW		
Part Number	36ASESRPVEFU01	36ASESRPVEAL01	36ASESRPVEID01	96PD-ESRP-VIFU01	96PD-ESRP-VIAL01	96PD-ESRP-VIID01
License	FULL	Alignment	ID	FULL	Alignment	ID
Camera Interface	GigE / USB 3.0			GigE		
Cameras	QCAM(Advantech industrial cameras), and standard machine vision cameras			QCAM(Advantech industrial cameras), ICAM(Advantech smart cameras'), and standard machine vision cameras		
No. of Cameras	4			6		
Resolution	up to 5M			up to 20M		
Image Format	Mono / Bayer Pattern					
Calibration	V					
Preprocessing	V					
Identification	V(Advanced mode)	X	V(Advanced mode)	V	X	V
Alignment	V(Advanced mode)	V(Advanced mode)	X	V	V	X
Gauge	V(Advanced mode)	V(Advanced mode)	X	V	V	X
Sequence	V					
Operator	V					
Communication	I/O, TCP/IP, MITSUBISHI MC, OMRON FINS			I/O, TCP/IP, API		
OS	Windows 10 64 bit					
Language	English / Chinese simplified					
Display	1200 x 800 or above			1920 x 1080 or above		

¹ Available in 2021Q4

Ordering Information

SW License

Part Number	Description
36ASESRPVEFU01	FULL, Advanced level
36ASESRPVEAL01	Alignment, Advanced level
36ASESRPVEID01	ID, Advanced level
96PD-ESRP-VIFU01	FULL, Entry level
96PD-ESRP-VIAL01	Alignment, Entry level
96PD-ESRP-VIID01	ID, Entry level

Industrial Camera

Part Number	Description
QCAM-GM0640-300CE	640 x 480, 376fps, Mono, GigE, POE
QCAM-GC0640-300CE	640 x 480, 340fps, Color, GigE, POE
QCAM-GM1440-073CE	1440 x 1080, 73fps, Mono, GigE, POE
QCAM-GC1440-073CE	1440 x 1080, 73fps, Color, GigE, POE
QCAM-GM2440-020CE	2448 x 2048, 23fps, Mono, GigE, POE
QCAM-GC2440-020CE	2448 x 2048, 23fps, Color, GigE, POE
QCAM-GM4000-008CE ¹	4024 x 3036, 8fps, Mono, GigE, POE
QCAM-GC4600-007CE ¹	4608 x 3288, 7fps, Color, GigE, POE
QCAM-GM5400-005CE ¹	5472 x 3648, 5fps, Mono, GigE, POE
QCAM-UM1440-220CE ²	1440 x 1080, 227fps, Mono, USB3.0
QCAM-UC1440-220CE ²	1440 x 1080, 227fps, Color, USB3.0
QCAM-UM2440-035CE ²	2448 x 2048, 35fps, Mono, USB3.0
QCAM-UC2440-035CE ²	2448 x 2048, 35fps, Color, USB3.0

¹ Compatible with 96PD-ESRP-VIFU01, 96PD-ESRP-VIAL01, 96PD-ESRP-VIID01

² Compatible with 36ASESRPVEFU01, 36ASESRPVEAL01, 36ASESRPVEID01

Smart Camera

Part Number	Description
ICAM-7100 ¹	1280 x 960, 54fps, Mono
ICAM-7110 ¹	1280 x 960, 54fps, Color
ICAM-7500 ¹	2592 x 1944, 14fps, Mono
ICAM-7510 ¹	2592 x 1944, 14fps, Color

¹ Compatible with 96PD-ESRP-VIFU01, 96PD-ESRP-VIAL01, 96PD-ESRP-VIID01

Platform

Part Number	Description
AIIS-3410	Compact vision system, supports Intel® 6th generation core i CPU
MIC-770	Compact fan less System with 8th Gen Intel® Core™ i CPU
IPC-220	Compact industrial computer system with 6th/7th Gen Intel® Core™ i CPU
UNO-2100	Intel® 7th Core™ i7/i5® 3965U Regular-Size modular box platform
TPC-300	Touch panel computer with 8th Gen Intel® Core™ i CPU
PPC-3181SW	All-in-one fan less panel PC 6th Gen Intel® Core™ i CPU
AMAX-5580 ¹	Intel® Core™ i7/i5/Celeron® control IPC With EtherCAT slice IO expansion

¹ Compatible with 96PD-ESRP-VIFU01, 96PD-ESRP-VIAL01, 96PD-ESRP-VIID01

Capture Cards

Part Number	Description
PCIE-1674E	4-Port PCI Express GigE vision frame grabber
PCIE-1672E	2-Port PCI Express GigE vision frame grabber

I/O Cards

Part Number	Description
PCIE-1730-AE	32-ch TTL and 32-ch isolated digital I/O PCIE card