ICAM-220

AI Vision Sensor with OCR Model

Features

- Default pre-trained languages support Traditional Chinese, Simplified Chinese, English, Japanese, and Vietnamese.
- Provides flexibility for users operating OCR inspection in a multilingual environment.
- Re-train function supports multiple languages, special fonts, and customized handwriting to enhance the adaptability of the software to various scenarios.
- The OCR result can be identified by "include" and "exclude" logical threshold conditions to define immediately
- RESTful API outputs identification results

Description

ICAM-220 industrial camera has a built-in AI pre-training model that supports multiple languages, enabling immediate use without additional training. The camera's true AI model identifies objects in images faster and more accurately, improving production efficiency. Its built-in light source lens makes images clearer and identification more accurate. The camera supports multiple fonts, handwriting fonts, and model retraining functions, further improving recognition accuracy. Logical thresholds accelerate inference results by setting "include" and "exclude" conditions, increasing recognition speed and accuracy. The camera provides DI/DO communication and RESTful API outputs results, facilitating communication and data transmission with other devices. Suitable for various industrial applications such as automated production lines, IQC, FQC, and smart logistics. The camera is software integrates hardware solution, easy to operate and supports multiple operating systems with good compatibility. Reduced the threshold of AI project implementation and the operator operation time efficiently.

Specifications

Model		ICAM-220 (with AI OCR model)
Processor system		6-core NVIDA Camel ARM® v8.2 64-bit CPU 6MB L2 + 4MB l3 (Max. operating frequency: 1.9GHz GPU: 384-core NVIDIA Volta GPU with 48 Tensor
Sensor features		1408 x 1080; pixel size (3.45 x 3.45 µm)
Storage		128GB microSD
Acquisition & processing		FPS=15
Synchronization		Hardware trigger / software trigger / free-run
Specifications	Pre-trained Languages	Traditional Chinese/Simplified Chinese/English/Japanese/Vietnamese
	Alphabet	A ~ Z; a ~ z
	Number	0 ~ 9
	Symbol	/:,#$&%
	Color	Color
	Contrast	10
	Character number	Horizontal: 60 characters
	Character size (pixel)	10 x 10 pixel
	Character spacing	2 pixels
Main Functions	Logical threshold Setting	"Included" type (IN): The prediction texts must contain all included filters; otherwise, the result will be "NG." "Excluded" type (EX): If any of the predictions contain excluded filters, the result will be "NG."
	Communication	DI0=H/W trigger DO0, 1
	Fonts supported	bitmap, printing, handwriting
	Surface compensation	Supported (surface, sphere, arc)
	Minimum number of training data	Printing character: 30 pcs
Power Requirements		19~24V$_{DC}$ Max: 18W, typical 15W
Dimensions		82mm (W) x 121mm (H) x 63 mm(D)
Environment		0-45°C, 5Grms
Certification		CE/FCC, IP54

Ordering Information

P/N	Description
ICAM-220-10W	NVIDIA Jetson Xavier NX with OCR pre-trained model, 1.6MP@60fps, color, 12mm Variable Focal length, White LEDs

Accessories

P/N	Description
96PSA-A65W19P2-1	Power supply A/D 100-240V 65W 19V
1700033418-01	3 m Power & DI/O cable with M12 male connector
1700032302-01	2 m Ethernet cable with M12 male connector

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