



Actual camera delivered with black powder coat

MULTISENSE KS21

An ultra-rugged stereo computer sensor with on-board processing, intelligently designed for safe operation in challenging indoor environments.

MULTISENSE KS21

PHYSICAL

Height:	4.7 cm
Width:	28.5 cm
Depth:	13.5 cm
Construction:	Aluminum
Mounting:	4x M5

ENVIRONMENTAL

Operating Temperature:	-30° to 65°C
Environmental Rating:	IP 67
Operating Relative Humidity:	93%

RUGGEDIZATION

Regulatory:	RoHS
Shock:	100 G
Vibration:	10 Grms
Gravel Bombardment:	Rock chip resistant objective elements
Water Accumulation:	Hydrophobic lens coating
Mud/Grime Accumulation:	100% convex design

STEREO IMAGE SENSOR

Color:	Monochrome
Resolution:	1920 x 1200
Shutter Type:	Global Shutter
Frame Rate:	30 FPS max
Field Of View (Raw):	135° x 84°

LASER EMITTER

Number of Dots:	22,800
Wavelength:	850 nm
Field of Illumination:	130° x 51°

STEREO VISION

Algorithm:	SGM (Semi-global stereo matching)
Baseline:	21.0 cm
Stereo Algorithm Speed:	30 FPS @ 0.5MP, 256 Disp.
Range:	0.5 - 20 m

ON-BOARD PROCESSING

Processor:	Quad Core ARM A53
Real-Time Processing:	ARM Cortex R5
GPU:	ARM Mali-400 MP2
RAM:	4 GB DDR4 w/ ECC
Operating System:	Petalinux
Available Programmable Logic:	Up to 150,000 logic cells

ELECTRICAL

Voltage (range):	9-36 VDC
Cold Cranking:	6 V
Power (nominal):	12 W (algorithm dependant)

INTERFACE

Network Interface:	1 Gigabit ethernet port (1000BASE-T)
Connector 1:	D-coded M12
Connector 2:	8-pin x-coded M12

