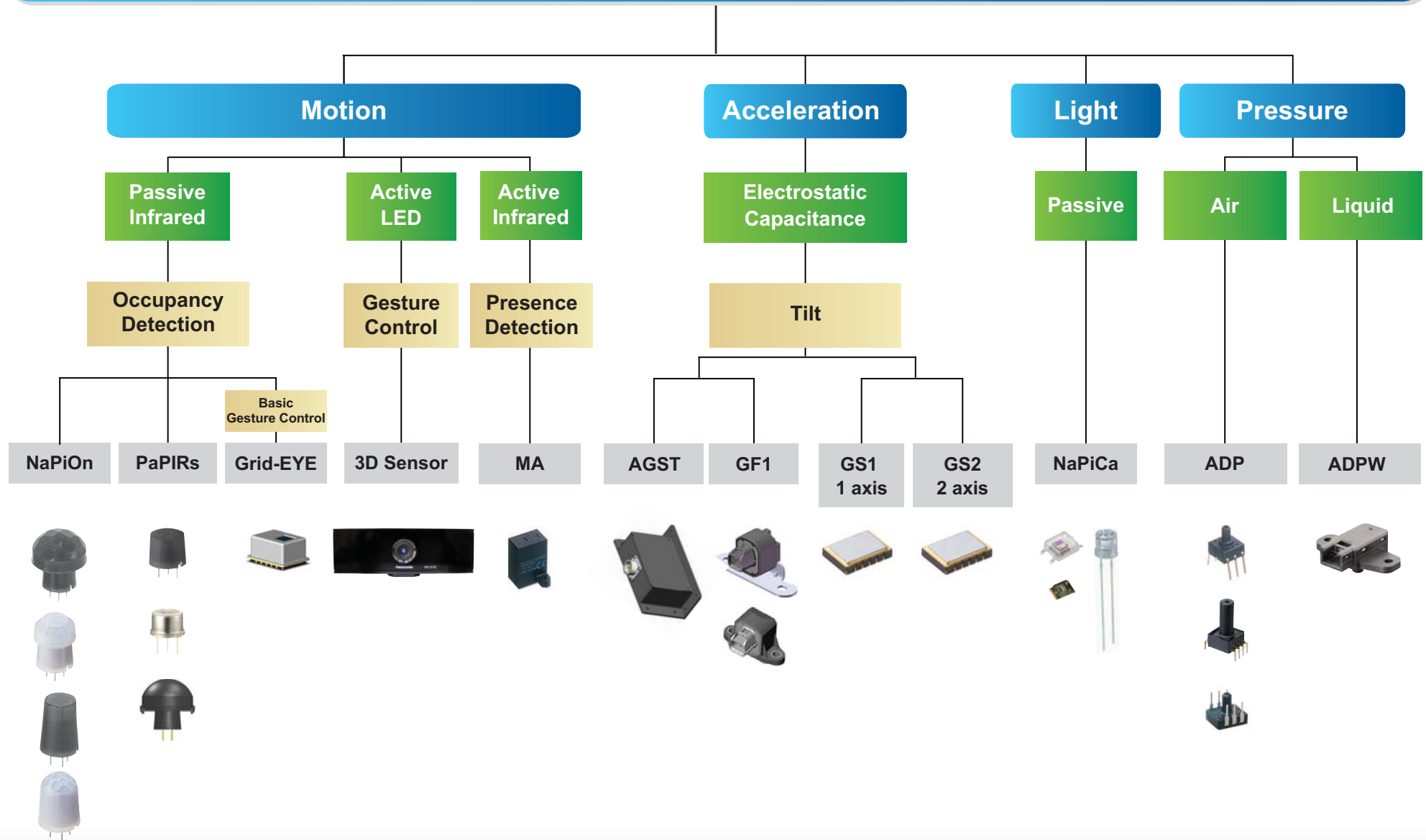
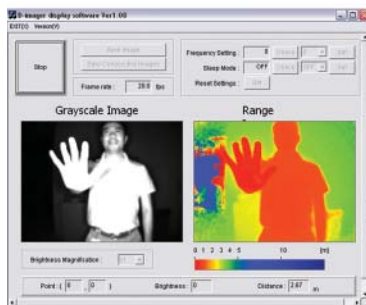


Sensors



APPLICATIONS

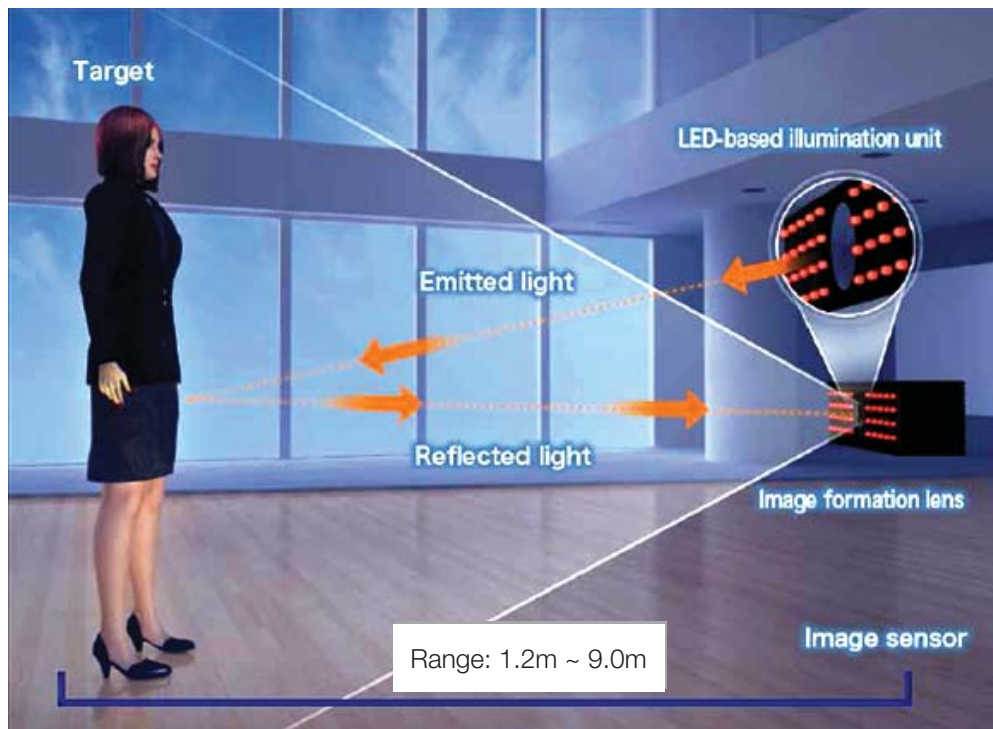
- Digital Signage
- Gaming/Arcade
- Security
- Robotics
- Amusement
- Museums
- Boardrooms
- Retail
- People/Animal Counting
- Interactive Kiosks
- Physical Rehab
- Athletic Training
- Showrooms
- Science Centers
- Industrial/Machine Control
- Automotive
- Research



Actual Camera Output

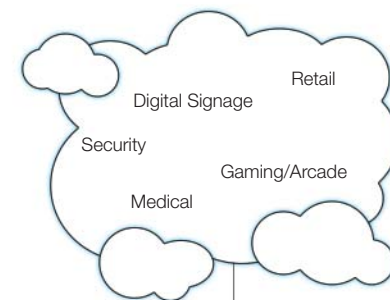


TIME-OF-FLIGHT TECHNOLOGY



Parameter	Value
Operating Range	1.2m ~ 9.0m 3.94ft ~ 29.53ft
Field of View	Horizontal 60° Vertical 44°
Pixel Array Size	Horizontal 160 Pixels Vertical 120 Pixels
Frame Rate	15, 20, 25, 30 FPS
Range Resolution	1. $\sigma = 3\text{cm}$ (1.18in.) (max.) (Ambient Illumination: 0lx) 2. $\sigma = 14\text{cm}$ (5.51in.) (max.) (Ambient Illumination: 20,000lx)
Absolute Accuracy	$\pm 4\text{cm}$ ($\pm 1.57\text{in.}$) (Ambient Illumination: 0lx)
Modulation Frequency	3 Modes
Operating Ambient Illumination	0 - 20,000lx max.
Output Type	Range Data 11 bit Image Data 8 bit
Connector	Mini-USB 2.0 *

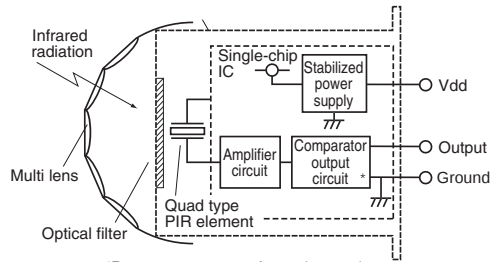
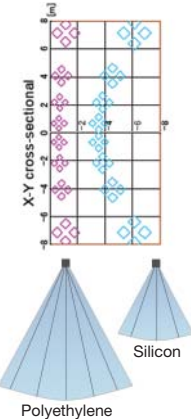
* AC Adapter & Mini-USB 2.0 Cable Not Included



Middleware Running On:
Windows 7, 64-bit
Windows XP, 32-bit (SP1,2,3)
Windows Vista, 32-bit (SP1)
Required

(Linux Coming Soon)



Range		2m	3m	5m			10m	12m	Fully Integrated Circuit	
Current										
Analog	170μA	 11.9mm Ø 15.2mm (H) Slight motion		 9.5 mm Ø 14.5mm (H) Standard	 8.9 mm Ø 15.1(H) Spot	 9.5mm Ø 14.4 mm(H) Standard	 18.5mm Ø 17.4mm (H) Long Distance	 20.7mm Ø 15.9mm (H) Long Distance	 *Remove comparator for analog version	
	170μA	 11.9mm Ø 15.2mm (H) Slight motion		 9.5 mm Ø 14.5mm (H) Standard	 8.9 mm Ø 15.1 (H) Spot	 9.5mm Ø 14.4 mm(H) Standard	 18.5mm Ø 17.4mm (H) Long Distance	 20.7mm Ø 15.9mm (H) Long Distance		
Digital	6μA		 3mm Ø 6mm (H)		 9.7mm Ø 10.1mm (H)	 9.5mm Ø 14.4 mm(H)		 20.7mm Ø 15.9mm (H) Long Distance	PaPIRs  Horizontal ASIC Silicon Lens Shown EKM A: • Lowest Profile • Silicon Lens with 3mm Aperture • Polyethylene Lens with Smooth Surface • Low Current: (1, 2, 6μA)	
	2μA		 3mm Ø 6mm (H)		 9.7mm Ø 10.1mm (H)	 9.5mm Ø 14.4 mm(H)		 20.7mm Ø 15.9 mm (H) Long Distance	AMN:  AMN: • Standard Profile • Polyethylene Lens • Current: (170μA) • Spot detection with smaller angle opening (option)	
	1μA Sleep Mode		 3mm Ø 6mm (H)		 9.7mm Ø 10.1mm (H)	 9.5mm Ø 14.4 mm(H)		 20.7mm Ø 15.9mm (H) Long Distance	Detection Zone  X-Y cross-sectional Polyethylene Silicon	
									EKM B: • Standard Profile • Polyethylene Lens Only with Smooth Surface • Low Current: (1, 2, 6μA) EKM C: • Standard Profile • Polyethylene Lens Only with Smooth Surface • Current: (170μA)	