

Performance Comparison NM33 vs others

Key features of NM33-N

- ◆ Newly developed small size fisheye lens provide ultra wide view of 180 x 360 degree. All around view is taken by one camera, this enables to **reduce the number of cameras**.
- ◆ Built-in high speed DSP (Digital Signal Processor) .
No need of optional extracting software. High speed output of 15 fps max. even with high resolution large data.
- ◆ Equipped digital signal output for JPEG image through USB as well as a NTSC/PAL composite video output.
- ◆ 3 million pixel color CMOS sensor assures **clarity in enlarged images**.
- ◆ With the built-in software, you can convert any part of hemispherical image to a flat image. 15 patterns for the image extracting including Pan/Tilt/Zoom, panoramic, etc...
- ◆ Up-side-down flip feature provides two ways of installation, **on a table and under a ceiling**.
- ◆ The elimination of the swinging and zooming mechanism has reduced its cost and risk of malfunction. Relatively **low defect rate**.



Product	View Angle	Pixels	Image Output	Image Pattern	Mechanism	Price Range
OPT Corporation NM33	180 x 360 no blind spot	3 Mega pixel (usable pixel: 1.7 M)	Digital (USB) Analog (NTSC/PAL)	15 patterns include up-side- down flip	no auto-panning	US\$1200 (NTT)
OPT Corporation NM33-M (w/depression angle)	214 x 360 no blind spot					
other Omnidirectional camera (SONY RPU-series)	180 x 360 Blind spot in center	appro. 1.34 M, 2M	VIDEO (NTSC/PAL)	7 patterns include up-side- down flip	no (PAL lens)	US\$1,700
other Omnidirectional camera (SHARP)		appro. 0.41 M	VIDEO (NTSC/PAL)	3 patterns	no (conical shape mirror)	US\$1,900
Mobotix (Germany) Q22, Q23	180 x 360 blind spots in particular angles	3 Mega pixel (usable pixel: 1.1 M)	Digital only (LAN output)	1/2/4 partition view (suspicion of patent infringement)	no auto-panning	US\$1,700
many suppliers single view angle camera	Fixed angle lens narrow view generally from 45 to 120 degree	0.27 to 0.42 M pixel	VIDEO (NTSC/PAL)	1 pattern	no	US\$1,000~
others P/T/Z mechanism camera	horizontal: 27~67 vertical: 20~50	0.27 to 0.42 M pixel	VIDEO (NTSC/PAL)	1 pattern	yes	US\$15,000