

## DIN EN 50132-7

As specified in the DIN EN 50132-7 standard, there are six different levels of quality for video surveillance. "Inspect" is the level with the highest demands on image quality, whereas "Monitor" is the one with the lowest. These can be used to determine the maximum distance between camera and surveillance area, the required minimum resolution, and the most suitable camera lens for optimal coverage of the surveillance area.

Opening angle								
Focal Length	1,6 mm	4 mm	5 mm	8 mm	10 mm	18 mm	28 mm	50 mm
Aperture f/	2,0	1,8	1,8	1,8	1,8	1,8	1,8	1,8
Max. Image angle (HxV; 16:9)	<b>180° x 180°</b>	<b>120° x 60°</b>	<b>95° x 50°</b>	<b>60° x 33°</b>	<b>45° x 25°</b>	<b>30° x 17°</b>	<b>15° x 8,5°</b>	<b>8° x 4,5°</b>
Max. Image angle (HxV; 4:3)		<b>83° x 60°</b>	<b>68° x 50°</b>	<b>44° x 33°</b>	<b>33° x 25°</b>	<b>22° x 17°</b>	<b>11° x 8,5°</b>	<b>6° x 4,5°</b>
Image width/height (dist. 1 m)	3,5 / 1,2 m	2,2 / 0,9 m	1,2 / 0,6 m	0,8 / 0,4 m	0,5 / 0,3 m	0,3 / 0,1 m	0,1 / 0,08 m	
Image width/height (dist. 10 m)	34,6 / 11,5 m	21,8 / 9,3 m	11,5 / 5,9 m	8,3 / 4,4 m	5,4 / 3,0 m	2,6 / 1,5 m	1,4 / 0,8 m	
Image width/height (dist. 50 m)	173,2 / 57,7 m	109,1 / 46,6 m	57,7 / 29,6 m	41,4 / 22,2 m	26,8 / 14,9 m	13,2 / 7,4 m	7,0 / 3,9 m	

\* B016 should be used in a 1:1 aspect ratio

<b>Maximum Distances In Meters @ 4K UHD (3840 x 2160)</b>								
Monitor	19,3 m	149,65 m	185,29 m	291,68 m	389,73 m	578,12 m	1.162,65 m	2.199,03 m
Detect	9,7 m	74,82 m	92,64 m	145,84 m	194,86 m	289,06 m	581,33 m	1.099,51 m
Observe	3,8 m	29,93 m	37,06 m	58,34 m	77,95 m	115,62 m	232,53 m	439,81 m
Recognize	1,4 m	14,96 m	18,53 m	29,17 m	38,97 m	57,81 m	116,27 m	219,90 m
Identify	1,9 m	7,48 m	9,26 m	14,58 m	19,49 m	28,91 m	58,13 m	109,95 m
Inspect	0,3 m	1,87 m	2,32 m	3,85 m	4,87 m	7,23 m	14,5 m	27,49 m

## Thermal sensor modules

Thanks to the increased number of pixels and the extended image angles of up to 90° x 69° with the VGA thermal modules, more scene details can be seen, larger areas can be covered (perimeter protection) and temperature differences can be detected from greater distances than with the CIF variants.



## Thermal Sensor Module Variants for M73/S74

Thermal resolution	Image angle (horiz. x vert.)	TR technology for temperature measurement
CIF: 336 x 256 pixels	9,3° x 7,1° (R/T 500)	Available with and without TR technology
CIF: 336 x 256 pixels	17° x 13° (R/T 280)	Available with and without TR technology
CIF: 336 x 256 pixels	25° x 19° (R/T 150)	Available with and without TR technology
CIF: 336 x 256 pixels	45° x 35° (R/T 100)	Available with and without TR technology
VGA: 640 x 480 pixels	18° x 14° (R/T 280)	Available with and without TR technology
VGA: 640 x 480 pixels	32° x 26° (R/T 150)	Available with and without TR technology
VGA: 640 x 480 pixels	45° x 37° (R/T 100)	Available with and without TR technology
VGA: 640 x 480 pixels	69° x 56° (R/T 080)	Available with and without TR technology
VGA: 640 x 480 pixels	90° x 69° (R/T 050)	Available with and without TR technology



## Thermal Sensor Module Eco Variants for M73/S74/p71

Thermal resolution	Image angle (horiz. x vert.)	TR technology for temperature measurement
CIF: 320 x 240 pixels	56° x 42° (T 080)	-
CIF: 320 x 240 pixels	105° x 75° (T 040)	-