

# China AI

## Margin under pressure amid weakening demand

Hikvision and Dahua both reported worse than expected 3Q22 results as macro headwinds surge. However, the diverging performance implies that Hikvision is more resilient than Dahua amid macro fluctuations. In particular, Hikvision revenue was up +3% YoY while that of Dahua was down -11% YoY in 3Q22. We are surprised to see Dahua's QoQ decline in revenue, considering the lockdown impact in 2Q22. Innovative businesses growth (Hikvision +18% YoY/ Dahua +40% YoY) was the common bright spot. With a weakening demand, margin will remain under pressure for both companies. Prefer Hikvision (BUY) over Dahua (HOLD).

### ■ Hikvision 3Q22 top-line largely in-line, bottom-line miss on lower margin.

Hikvision delivered a weak, yet largely anticipated, 3Q22 results with revenue of RMB22.46bn (+3% YoY, +8% QoQ) and net profit of RMB3.08bn (-31% YoY). This is attributable to 1) project delays given COVID-19 resurgence in China, 2) lower GPM (-5.3 pts YoY to 41.0%) given more low-margin product sales through channel and 3) higher R&D of RMB2.68bn (+22% YoY, +3% QoQ). Company commented that PBG/ EBG businesses declined slightly in 3Q22, however, SMBG was down 21% YoY, offsetting the growth in overseas (+13% YoY) and innovative businesses (+18% YoY). Macro weakness may continue to weigh on 1H23 results and that rebound in PBG could come earlier than EBG/ SMBG segments. Meanwhile, management guided that FY22 net profit will be no less than FY20 level, implying around 15% YoY decline in FY4Q22 net profit. Headcount has been frozen since Jun and the company will continue to focus on cost control in FY23.

### ■ Dahua 3Q22 big miss as revenue was down QoQ unexpectedly.

Dahua reported a depressing 3Q22 results with revenue of RMB7.09bn (-11% YoY, -14% QoQ) and net profit of RMB173mn (-77% YoY, -85% QoQ). Dahua attributed the top line decline to 1) Gov't projects delay (-25% YoY), 2) softening channel sales and 3) significant decline in overseas revenue growth. These have offset the growth in 1) EBG (nearly up +10% YoY) and 2) Innovative businesses (+40% YoY). Although 3Q22 GPM was up 1.1 pts QoQ to 37.6%, bottom line was under pressure given +5% YoY in opex (opex ratio 37.2%). Management commented that opex has peaked in 3Q22 and that 4Q22 and FY23 should deliver earnings improvement.

### ■ Diverging 3Q22 performance reflects that Hikvision is more resilient than Dahua amid macro fluctuations.

Although both companies delivered weaker than expected 3Q22 results, Hikvision is more resilient than Dahua in terms of 1) revenue growth (Hikvision +3% YoY vs. Dahua -11% YoY), 2) operating margin (Hikvision 13.8% vs. Dahua 0.4%) and 3) inventory management (Hikvision inventory to sales ratio dropped QoQ to 0.87 vs. Dahua QoQ increased to 0.97). We cut target price of Hikvision from RMB41.46 to RMB37.44, Dahua from RMB13.97 to RMB11.07 on earnings downward revision. Prefer Hikvision (BUY) over Dahua (HOLD).

### Valuation Table

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	P/E FY23E	EV/sales FY23E	ROE FY22E	Sales CAGR FY21-24E
Hikvision	002415 CH	BUY	36,910	28.40	37.44	15.2	2.7	20.6	12%
Dahua	002236 CH	HOLD	4,969	11.89	11.07	10.7	1.0	11.2	4%
SenseTime	20 HK	BUY	5,079	1.19	2.10	n.a.	5.9	n.a.	18%
AIInnovation	2121 HK	NR	1,331	18.68	n.a.	n.a.	5.4	n.a.	63%
Arcsoft	688088 CH	NR	1,373	24.54	n.a.	42.9	14.0	5.4	7.9

Source: Company data, Bloomberg, CMBIGM estimates

**OUTPERFORM**  
(Maintain)

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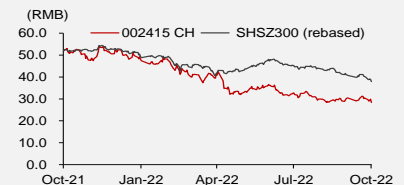
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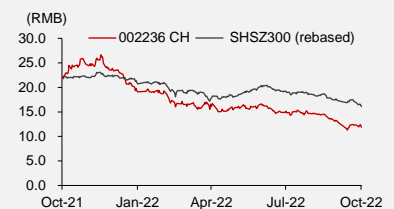
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### Hikvision 12-mth Price Performance



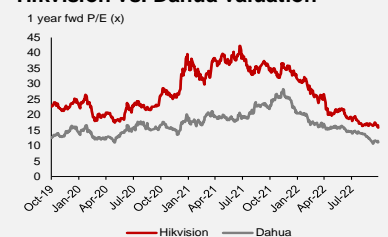
Source: Bloomberg

### Dahua 12-mth Price Performance



Source: Bloomberg

### Hikvision vs. Dahua valuation



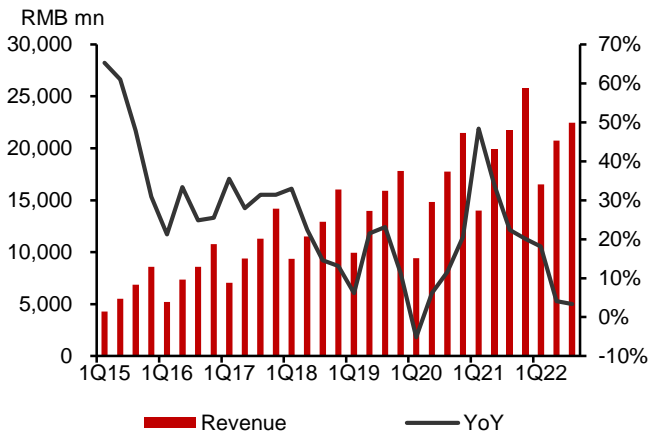
Source: Bloomberg

### Related Reports

1. "China AI – Public security demand remained weak in 3Q22, limited near term impact from new US export rules" – 20 Oct 2022 ([link](#))
2. "China AI – U.S. may broaden AI chips export restrictions" – 14 Sep 2022 ([link](#))
3. "China AI – U.S. is restricting advanced GPU sales to China" – 1 Sep 2022 ([link](#))

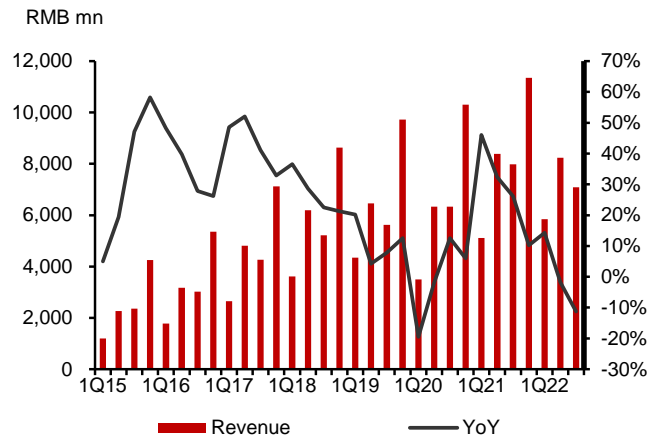
**Focus Charts**

**Figure 1: Hikvision quarterly revenue and YoY growth**



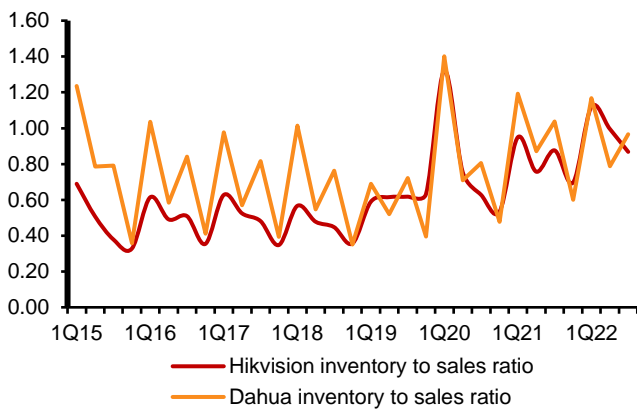
Source: Company data, CMBIGM estimates

**Figure 2: Dahua quarterly revenue and YoY growth**



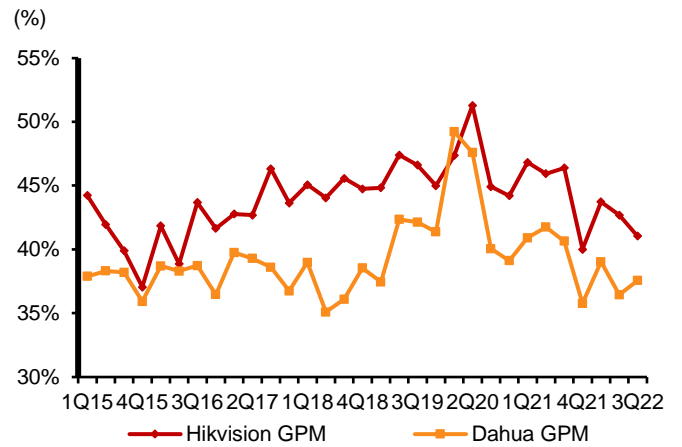
Source: Company data, CMBIGM estimates

**Figure 3: Hikvision vs. Dahua inventory to sales ratio**



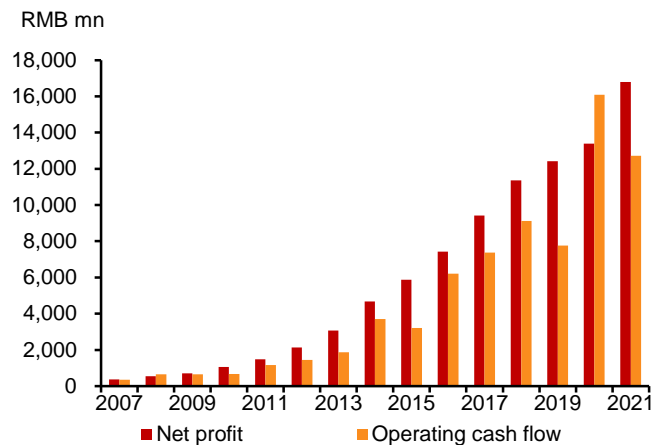
Source: Company data, CMBIGM estimates

**Figure 4: Hikvision vs. Dahua GPM trend**



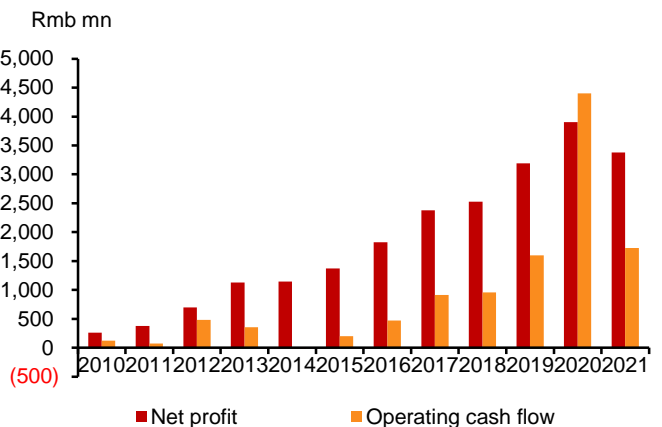
Source: Company data, CMBIGM estimates

**Figure 5: Hikvision net profit vs. operating cash flow**



Source: Company data

**Figure 6: Dahua net profit vs. operating cash flow**



Source: Company data

## Hikvision FY3Q22 results review

- **Revenue** was RMB22,464mn (+3% YoY, +8% QoQ), missed our estimate by 5% and consensus by 7%.
- **Gross profit** was RMB9,219mn (-9% YoY, +4% QoQ), missed our estimate by 8% and consensus by 12%.
- **Gross margin** was 41.0%, (-5.3 pct pts YoY, -1.6 pct pts QoQ), below our estimate by 1.4 pct pts and consensus by 2.3 pct pts.
- **Operating profit** was RMB3,090mn (-36% YoY, +8% QoQ), missed our estimate by 29% and consensus by 34%.
- **Operating margin** was 13.8% (-8.5 pct pts YoY, 0 pct pts QoQ), below our estimate by 4.5 pct pts and consensus by 5.6 pct pts.
- **Net profit** was RMB3,081mn (-31% YoY, -11% QoQ), below our estimate by 29% and consensus by 30%
- **EPS** was RMB0.33 (-32% YoY, -11% QoQ), below our estimate by 29% and consensus by 36%.

Figure 7: FY3Q22 results review

	Sep-21 3Q21	Jun-22 2Q22	Sep-22 3Q22			Sep-22 3Q22	versus	Sep-22 3Q22	versus
RMB mn	actual	actual	actual	YoY	QoQ	CMBI	CMBI	consensus	consensus
Revenue	21,727	20,736	22,464	3%	8%	23,705	-5%	24,256	-7%
Gross profit	10,078	8,851	9,219	-9%	4%	10,066	-8%	10,509	-12%
Gross margin	46.4%	42.7%	41.0%	-5.3 pct pts	-1.6 pct pts	42.5%	-1.4 pct pts	43.3%	-2.3 pct pts
Operating profit (adjusted)	4,826	2,855	3,090	-36%	8%	4,334	-29%	4,695	-34%
Operating margin (adjusted)	22.2%	13.8%	13.8%	-8.5 pct pts	0 pct pts	18.3%	-4.5 pct pts	19.4%	-5.6 pct pts
Net non-op	604	1,046	654			593		373	
PBT	5,430	3,901	3,745	-31%	-4%	4,926	-24%	5,068	-26%
Tax	-788	-178	-509			-468		-665	
Minorities	-158	-247	-154			-142			
Net income	4,484	3,475	3,081	-31%	-11%	4,317	-29%	4,402	-30%
EPS RMB	0.48	0.37	0.33	-32%	-11%	0.46	-29%	0.51	-36%

Source: Company data, CMBIGM

**Figure 8: Hikvision earnings revision**

RMB mn	2022E			2023E			2024E		
	New	Old	%Diff	New	Old	%Diff	New	Old	%Diff
Sales	86,749	89,344	-3%	95,369	101,006	-6%	113,414	119,965	-5%
Gross profit	36,283	38,041	-5%	41,009	43,858	-6%	50,481	51,731	-2%
OP Profit	13,373	16,043	-17%	17,458	19,816	-12%	22,112	23,288	-5%
PBT	16,161	18,614	-13%	20,663	22,822	-9%	23,706	24,509	-3%
Net profit	13,770	16,116	-15%	17,661	19,554	-10%	20,306	21,047	-4%
EPS	1.46	1.71	-15%	1.87	2.07	-10%	2.15	2.23	-4%
<b>Margins</b>									
GM	41.8%	42.6%	-75 bps	43.0%	43.4%	-42 bps	44.5%	43.1%	139 bps
OPM	15.4%	18.0%	-254 bps	18.3%	19.6%	-131 bps	19.5%	19.4%	8 bps
PBT margin	18.6%	20.8%	-221 bps	21.7%	22.6%	-93 bps	20.9%	20.4%	47 bps
Net margin	15.9%	18.0%	-216 bps	18.5%	19.4%	-84 bps	17.9%	17.5%	36 bps

Source: Company data, CMBIGM estimates

**Figure 9: Hikvision CMBI estimates vs. consensus**

RMB mn	CMBI	2022E		CMBI	2023E		CMBI	2024E	
		Street	Diff		Street	Diff		Street	Diff
Sales	86,749	92,377	-6%	95,369	108,809	-12%	113,414	127,770	-11%
Gross profit	36,283	40,260	-10%	41,009	47,783	-14%	50,481	56,328	-10%
OP Profit	13,373	19,649	-32%	17,458	23,825	-27%	22,112	28,319	-22%
PBT	16,161	20,040	-19%	20,663	24,017	-14%	23,706	28,393	-17%
Net profit	13,770	17,761	-22%	17,661	21,219	-17%	20,306	24,995	-19%
EPS	1.46	1.90	-23%	1.87	2.29	-18%	2.15	2.70	-20%
<b>Margins</b>									
GM	41.8%	43.6%	-176 bps	43.0%	43.9%	-91 bps	44.5%	44.1%	43 bps
OPM	15.4%	21.3%	-585 bps	18.3%	21.9%	-359 bps	19.5%	22.2%	-267 bps
PBT margin	18.6%	21.7%	-307 bps	21.7%	22.1%	-41 bps	20.9%	22.2%	-132 bps
Net margin	15.9%	19.2%	-335 bps	18.5%	19.5%	-98 bps	17.9%	19.6%	-166 bps

Source: Company data, CMBIGM estimates, Bloomberg

Figure 10: Hikvision operating model

RMB mn	2020	2021	2022E	2023E	2024E
Revenues	63,503	81,420	86,749	95,369	113,414
Cost of sales	(33,958)	(45,329)	(50,467)	(54,359)	(62,932)
Gross Profit	29,546	36,091	36,283	41,009	50,481
<i>Gross margin</i>	<i>46.5%</i>	<i>44.3%</i>	<i>41.8%</i>	<i>43.0%</i>	<i>44.5%</i>
R&D	(6,379)	(8,252)	(10,140)	(10,319)	(12,640)
SG&A	(9,168)	(10,719)	(12,229)	(12,611)	(15,012)
Operating Income	13,583	16,559	13,373	17,458	22,112
<i>Operating margin</i>	<i>21.4%</i>	<i>20.3%</i>	<i>15.4%</i>	<i>18.3%</i>	<i>19.5%</i>
Non-Operating Income	1,690	1,909	2,788	3,205	1,594
Profit Before Tax	15,273	18,468	16,161	20,663	23,706
Income tax (expense) gain	(1,595)	(957)	(1,674)	(2,066)	(2,371)
Minorities	(293)	(710)	(716)	(935)	(1,029)
Net Income to Shareholders	13,386	16,800	13,770	17,661	20,306
<i>Net margin</i>	<i>21.1%</i>	<i>20.6%</i>	<i>15.9%</i>	<i>18.5%</i>	<i>17.9%</i>
EPS (RMB)	1.43	1.80	1.46	1.87	2.15
DPS (RMB)	0.70	0.80	0.90	0.74	0.95
<b>Revenue breakdown</b>					
Core camera solution	55,721	65,146	68,758	74,491	87,899
Construction	1,614	4,004	3,147	3,482	3,830
Innovative business	6,168	12,271	14,844	17,396	21,685
PBG	15,987	19,161			
EBG	14,724	16,629			
SMBG	9,209	13,490			
Domestic	45,807	59,435			
Export	17,697	21,985			
<b>Gross margin breakdown</b>					
Core camera solution	48.4%	46.4%	43.1%	44.5%	46.0%
Construction	16.2%	23.0%	18.1%	20.7%	20.4%
Innovative business	37.3%	40.5%	40.4%	40.9%	42.7%
Domestic	44.9%	44.5%			
Export	50.7%	44.0%			
<b>Growth YoY</b>					
Revenues	10%	28%	7%	10%	19%
Gross profit	11%	22%	1%	13%	23%
Operating Income	18%	22%	-19%	31%	27%
EPS	8%	26%	-19%	28%	15%

Source: Company data, CMBIGM estimates

## Dahua FY3Q22 results review

- **Revenue** was RMB7,085mn (-11% YoY, -14% QoQ), missed our estimate by 17% and consensus by 18%.
- **Gross profit** was RMB2,661mn (-15% YoY, -11% QoQ), missed our estimate by 13% and consensus by 17%.
- **Gross margin** was 37.6%, (-1.6 pct pts YoY, +1.1 pct pts QoQ), beat our estimate by 1.7 pct pts and consensus by 0.6 pct pts.
- **Operating profit** was RMB28mn (-95% YoY, -96% QoQ), missed our estimate by 95% and consensus by 96%.
- **Operating margin** was 0.4% (-7.2 pct pts YoY, -9.4 pct pts QoQ), below our estimate by 5.6 pct pts and consensus by 8.4 pct pts.
- **Net profit** was RMB173mn (-77% YoY, -85% QoQ), below our estimate by 75% and consensus by 77%
- **EPS** was RMB0.06 (-77% YoY, -85% QoQ), below our estimate by 75%.

Figure 11: FY3Q22 results review

	Sep-21	Jun-22	Sep-22			Sep-22		Sep-22	
	3Q21	2Q22	3Q22			3Q22	versus	3Q22	versus
RMB mn	actual	actual	actual	YoY	QoQ	CMBI	CMBI	consensus	consensus
Revenue	7,980	8,239	7,085	-11%	-14%	8,535	-17%	8,653	-18%
Gross profit	3,123	3,002	2,661	-15%	-11%	3,064	-13%	3,200	-17%
Gross margin	39.1%	36.4%	37.6%	-1.6 pct pts	1.1 pct pts	35.9%	1.7 pct pts	37.0%	0.6 pct pts
Operating profit (adjusted)	607	806	28	-95%	-96%	516	-95%	758	-96%
Operating margin (adjusted)	7.6%	9.8%	0.4%	-7.2 pct pts	-9.4 pct pts	6.0%	-5.6 pct pts	8.8%	-8.4 pct pts
Net non-op	155	494	116			250		95	
PBT	762	1,300	144	-81%	-89%	766	-81%	853	-83%
Tax	-26	-101	18			-77			
Minorities	20	-35	11			-6			
Net income	756	1,164	173	-77%	-85%	684	-75%	752	-77%
EPS RMB	0.25	0.39	0.06	-77%	-85%	0.23	-75%		

Source: Company data, CMBIGM

**Figure 12: Dahua earnings revision**

RMB mn	2022E			2023E			2024E		
	New	Old	%Diff	New	Old	%Diff	New	Old	%Diff
Sales	31,789	35,562	-11%	32,041	39,078	-18%	36,655	45,184	-19%
Gross profit	11,805	12,927	-9%	12,242	14,622	-16%	14,032	17,066	-18%
OP Profit	2,465	3,341	-26%	3,557	4,331	-18%	3,923	5,300	-26%
PBT	3,011	4,076	-26%	3,686	4,729	-22%	3,837	5,602	-32%
Net profit	2,802	3,695	-24%	3,358	4,238	-21%	3,651	5,178	-29%
EPS	0.92	1.22	-24%	1.11	1.40	-21%	1.20	1.71	-29%
<b>Margins</b>									
GM	37.1%	36.4%	78 bps	38.2%	37.4%	79 bps	38.3%	37.8%	51 bps
OPM	7.8%	9.4%	-164 bps	11.1%	11.1%	2 bps	10.7%	11.7%	-103 bps
PBT margin	9.5%	11.5%	-199 bps	11.5%	12.1%	-60 bps	10.5%	12.4%	-193 bps
Net margin	8.8%	10.4%	-157 bps	10.5%	10.8%	-36 bps	10.0%	11.5%	-150 bps

Source: Company data, CMBIGM estimates

**Figure 13: Dahua CMBI estimates vs. consensus**

RMB mn	2022			2023			2024		
	CMBI	Street	CMBI	Street	CMBI	Street	CMBI	Street	Diff
Sales	31,789	36,759	-14%	32,041	42,474	-25%	36,655	49,233	-26%
Gross profit	11,805	14,135	-16%	12,242	16,633	-26%	14,032	19,426	-28%
OP Profit	2,465	3,978	-38%	3,557	4,866	-27%	3,923	5,994	-35%
PBT	3,011	4,207	-28%	3,686	5,047	-27%	3,837	6,237	-38%
Net profit	2,802	3,921	-29%	3,358	4,660	-28%	3,651	5,723	-36%
EPS	0.9	1.3	-29%	1.1	1.5	-28%	1.2	1.9	-37%
<b>Margins</b>									
GM	37.1%	38.5%	-132 bps	38.2%	39.2%	-95 bps	38.3%	39.5%	-118 bps
OPM	7.8%	10.8%	-307 bps	11.1%	11.5%	-35 bps	10.7%	12.2%	-147 bps
PBT margin	9.5%	11.4%	-197 bps	11.5%	11.9%	-38 bps	10.5%	12.7%	-220 bps
Net margin	8.8%	10.7%	-185 bps	10.5%	11.0%	-49 bps	10.0%	11.6%	-166 bps

Source: Company data, Bloomberg, CMBIGM estimates

## Valuation

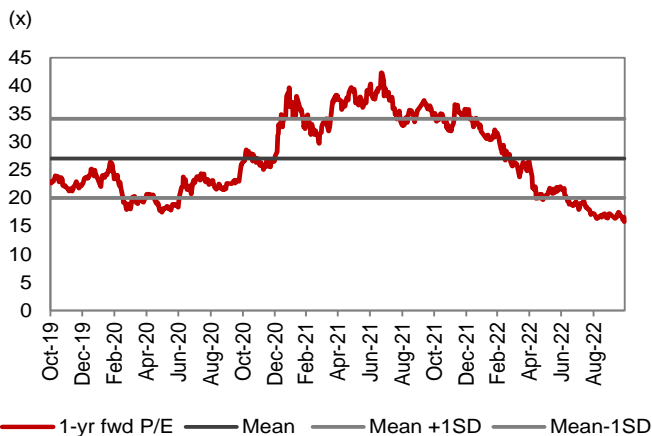
### Hikvision (002145 CH, BUY, Trim TP RMB41.46 → RMB37.44)

Maintain BUY with new target price of RMB37.44 (prior RMB41.46). We derived our target price from unchanged 20x FY23E P/E, 1-SD below its three-year mean. We think current valuation has over-reacted to the U.S. new restrictions. Hikvision's continuous R&D and business diversification should drive re-rating. Also, Hikvision announced share repurchase plan of no less than RMB2-2.5bn in the coming 12 months on 16 Sep. Its technology/ market leadership as well as strong cash flow should provide support to share price amid market fluctuation.

### Dahua (002236 CH, HOLD, Trim TP RMB13.97 → RMB11.07)

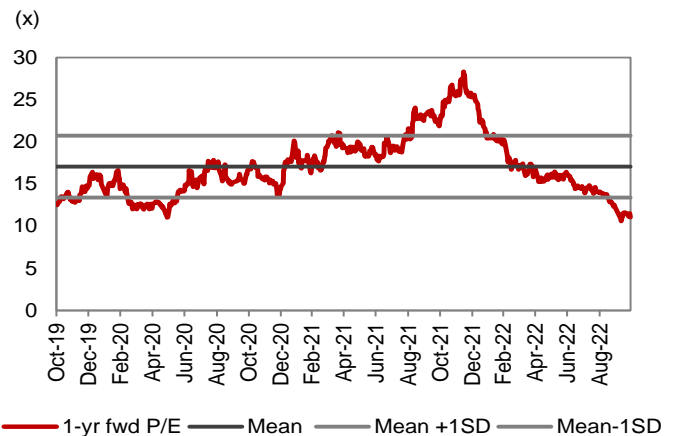
Maintain HOLD with new target price of RMB11.07 (prior RMB13.97), based on unchanged 10x FY23 P/E, lowest trading multiple in the past three years to reflect heightening macro uncertainties. We are less positive on Dahua as its technology, supply chain management and cash flow are worse than Hikvision. We expect valuation gap between Hikvision and Dahua to widen.

Figure 14: Hikvision 12M forward P/E chart



Source: Company data, CMBIGM, Bloomberg

Figure 15: Dahua 12M forward P/E chart



Source: Company data, CMBIGM, Bloomberg

Figure 16: Peers' valuation

Company	Ticker	Rating	Mkt Cap (US\$ mn)	Price (LC)	TP (LC)	P/E FY23E	EV/sales FY23E	ROE FY22E	ROE FY23E	Sales CAGR FY21-24E	EPS CAGR FY21-24E	
Hikvision	002145 CH	BUY	36,910	28.40	37.44	15.2	2.3	20.6	23.4	12%	6%	
Dahua	002236 CH	HOLD	4,969	11.89	11.07	10.7	0.9	11.2	12.2	4%	2%	
SenseTime	20 HK	BUY	5,079	1.19	2.10	n.a.	3.5	n.a.	n.a.	18%	n.a.	
Alnovation	2121 HK	NR	1,331	18.68	n.a.	n.a.	3.4	n.a.	n.a.	63%	n.a.	
Cambricon Tech	688256 CH	NR	3,579	64.82	n.a.	n.a.	16.3	n.a.	n.a.	44%	n.a.	
Arcsoft	688088 CH	NR	1,373	24.54	n.a.	42.9	10.1	5.4	7.9	25%	34%	
						<b>Mean</b>	<b>31.2</b>	<b>7.4</b>	<b>11.9</b>	<b>14.2</b>	<b>28%</b>	<b>18%</b>
						<b>Median</b>	<b>29.0</b>	<b>3.5</b>	<b>10.8</b>	<b>12.7</b>	<b>25%</b>	<b>18%</b>

Source: Bloomberg, CMBIGM estimates



## Financial Summary – Hikvision (002415 CH)

### Income statement

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Revenue</b>	<b>63,503</b>	<b>81,420</b>	<b>86,749</b>	<b>95,369</b>	<b>113,414</b>
Cost of sales	(33,958)	(45,329)	(50,467)	(54,359)	(62,932)
<b>Gross profit</b>	<b>29,546</b>	<b>36,091</b>	<b>36,283</b>	<b>41,009</b>	<b>50,481</b>
Selling exp	(7,378)	(8,586)	(9,619)	(9,926)	(11,708)
Admin exp	(1,790)	(2,132)	(2,610)	(2,685)	(3,304)
R&D exp	(6,379)	(8,252)	(10,140)	(10,319)	(12,640)
Other operating exp.	(416)	(561)	(541)	(621)	(717)
<b>Operating profit</b>	<b>13,583</b>	<b>16,559</b>	<b>13,373</b>	<b>17,458</b>	<b>22,112</b>
Finance costs	(396)	133	1,094	1,495	1,699
Other non-oper exp.	2,086	1,776	1,694	1,710	(104)
<b>Pre-tax profit</b>	<b>15,273</b>	<b>18,468</b>	<b>16,161</b>	<b>20,663</b>	<b>23,706</b>
Income tax expense	(1,595)	(957)	(1,674)	(2,066)	(2,371)
Minority interests	(293)	(710)	(716)	(935)	(1,029)
<b>Net profit to S/H</b>	<b>13,386</b>	<b>16,800</b>	<b>13,770</b>	<b>17,661</b>	<b>20,306</b>

### Cash flow summary

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Net profit</b>	<b>13,386</b>	<b>16,800</b>	<b>13,765</b>	<b>17,661</b>	<b>20,306</b>
Depreciation/amortization	845	892	1,402	1,698	1,919
Change in working capital	597	(7,081)	(729)	10,912	(3,118)
Others	1,260	2,097	588	935	1,029
<b>Net cash from operating</b>	<b>16,088</b>	<b>12,709</b>	<b>15,026</b>	<b>31,207</b>	<b>20,137</b>
Capex	(2,004)	(3,098)	(3,579)	(3,477)	(3,496)
Other	(551)	(58)	170	0	0
<b>Net cash from investing</b>	<b>(2,555)</b>	<b>(3,156)</b>	<b>(3,409)</b>	<b>(3,477)</b>	<b>(3,496)</b>
Net borrowings	2,049	(1,842)	2,876	(2,582)	1,085
Dividend paid	(6,542)	(7,475)	(8,490)	(6,956)	(8,925)
Other	(189)	(791)	2,604	(935)	(1,029)
<b>Net cash from financing</b>	<b>(4,681)</b>	<b>(10,10)</b>	<b>(3,010)</b>	<b>(10,47)</b>	<b>(8,869)</b>
<b>Net change in cash</b>	<b>8,852</b>	<b>(556)</b>	<b>8,607</b>	<b>17,257</b>	<b>7,771</b>
Cash (beginning of the year)	27,072	35,460	34,722	43,478	60,735
Exchange difference	(464)	(182)	149	0	0
<b>Cash (end of the year)</b>	<b>35,460</b>	<b>34,722</b>	<b>43,478</b>	<b>60,735</b>	<b>68,506</b>

### Balance sheet

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Current assets</b>	<b>74,763</b>	<b>86,019</b>	<b>96,461</b>	<b>117,743</b>	<b>137,284</b>
Cash & equivalents	35,460	34,722	43,478	60,735	68,506
Account receivables	24,098	28,563	32,028	33,695	40,111
Inventory	11,478	17,974	16,550	18,290	22,784
Other current assets	3,727	4,760	4,405	5,024	5,882
<b>Non-current assets</b>	<b>13,939</b>	<b>17,845</b>	<b>21,293</b>	<b>23,072</b>	<b>24,648</b>
PPE	7,301	9,019	12,030	13,808	15,385
Intangible assets	1,634	1,665	1,928	1,928	1,928
Other non-current assets	5,003	7,162	7,335	7,335	7,335
<b>Total assets</b>	<b>88,702</b>	<b>103,865</b>	<b>117,754</b>	<b>140,814</b>	<b>161,932</b>
<b>Current liabilities</b>	<b>31,225</b>	<b>33,292</b>	<b>35,133</b>	<b>48,484</b>	<b>57,587</b>
ST borrowings	7,507	4,672	5,584	3,998	4,450
Account payables	14,631	17,230	17,990	31,562	37,725
Accrued expense	6,173	7,888	7,803	8,336	10,414
Other current liabilities	2,914	3,502	3,757	4,588	4,999
<b>Non-current liabilities</b>	<b>2,997</b>	<b>5,178</b>	<b>9,814</b>	<b>8,818</b>	<b>9,451</b>
LT borrowings	1,961	3,284	5,214	4,218	4,851
Other non-current liabilities	1,036	1,894	4,600	4,600	4,600
<b>Total liabilities</b>	<b>34,222</b>	<b>38,470</b>	<b>44,947</b>	<b>57,302</b>	<b>67,038</b>
Share capital	9,343	9,336	9,433	9,433	9,433
Capital surplus	5,179	5,404	9,046	9,046	9,046
Retained earnings	40,479	49,821	55,097	65,802	77,183
Other reserves	(1,207)	(1,100)	(3,341)	(3,341)	(3,341)
<b>Minority interest</b>	<b>685</b>	<b>1,934</b>	<b>2,573</b>	<b>2,573</b>	<b>2,573</b>
<b>Total equity</b>	<b>53,794</b>	<b>63,461</b>	<b>70,235</b>	<b>80,940</b>	<b>92,321</b>
<b>Total liabilities and</b>	<b>88,702</b>	<b>103,865</b>	<b>117,754</b>	<b>140,814</b>	<b>161,932</b>

### Key ratios

YE 31 Dec	FY20	FY21	FY22E	FY23E	FY24E
<b>Revenue mix</b>					
Core camera solution	88%	80%	79%	78%	78%
Construction	3%	5%	4%	4%	3%
Smart home business	10%	15%	17%	18%	19%
Robotics					
Other innovative business	10%	28%	7%	10%	19%
<b>Growth (%)</b>	18%	22%	-19%	31%	27%
Revenue	8%	26%	-18%	28%	15%
Operating profit	8%	26%	-19%	28%	15%
EPS					
<b>Margin (%)</b>	46.5%	44.3%	41.8%	43.0%	44.5%
Gross margin	21.4%	20.3%	15.4%	18.3%	19.5%
Operating margin	21.1%	20.6%	15.9%	18.5%	17.9%
Net profit margin					
<b>Balance sheet ratio</b>	2.39	2.58	2.75	2.43	2.38
Current ratio (x)	136	118	127	126	119
Receivable turnover days	65	66	73	67	66
Inventory turnover days	157	139	130	121	121
Payable turnover days	net cash	net cash	net cash	net cash	net cash
Net debt to equity					
<b>Profitability (%)</b>	27.1%	28.7%	20.6%	23.4%	23.4%
ROE	42.7%	44.9%	28.2%	39.2%	52.5%
ROIC					
<b>Per share data (RMB)</b>	1.43	1.80	1.46	1.87	2.15
EPS (RMB)	0.70	0.80	0.90	0.74	0.95
DPS (RMB)	5.76	6.80	7.45	8.58	9.79
BVPS (RMB)	88%	80%	79%	78%	78%

Source: Company data, CMBIGM estimates

## Financial Summary – Dahua (002236 CH)

### Income statement

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Revenue</b>	<b>26,466</b>	<b>32,835</b>	<b>31,789</b>	<b>32,041</b>	<b>36,655</b>
Cost of sales	(15,164)	(20,059)	(19,984)	(19,799)	(22,623)
<b>Gross profit</b>	<b>11,302</b>	<b>12,777</b>	<b>11,805</b>	<b>12,242</b>	<b>14,032</b>
Selling exp	(4,291)	(4,664)	(4,480)	(4,258)	(4,770)
Admin exp	(785)	(955)	(977)	(899)	(1,078)
R&D exp	(2,998)	(3,452)	(3,701)	(3,362)	(4,060)
Other operating exp.	(162)	(183)	(183)	(166)	(201)
<b>Operating profit</b>	<b>3,066</b>	<b>3,523</b>	<b>2,465</b>	<b>3,557</b>	<b>3,923</b>
Finance costs	58	57	544	72	(80)
Other non-oper exp.	1,125	(111)	2	56	(6)
<b>Pre-tax profit</b>	<b>4,249</b>	<b>3,470</b>	<b>3,011</b>	<b>3,686</b>	<b>3,837</b>
Income tax expense	(314)	(58)	(198)	(369)	(230)
Minority interests	(32)	(33)	(10)	41	44
<b>Net profit to shareholders</b>	<b>3,903</b>	<b>3,378</b>	<b>2,802</b>	<b>3,358</b>	<b>3,651</b>

### Cash flow summary

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Net profit</b>	<b>3,903</b>	<b>3,378</b>	<b>2,802</b>	<b>3,358</b>	<b>3,651</b>
Depreciation/amortization	331	393	583	647	657
Change in working capital	(186)	(2,128)	(3,852)	453	(2,957)
Others	354	85	229	(41)	(44)
<b>Net cash from operating</b>	<b>4,402</b>	<b>1,728</b>	<b>(239)</b>	<b>4,418</b>	<b>1,306</b>
Capex	(642)	(1,227)	(1,179)	(481)	(550)
Other	452	(627)	739	0	0
<b>Net cash from investing</b>	<b>(190)</b>	<b>(1,855)</b>	<b>(440)</b>	<b>(481)</b>	<b>(550)</b>
Net borrowings	715	1,374	1,333	71	91
Dividend paid	(399)	(803)	(809)	(671)	(804)
Other	53	(77)	72	41	44
<b>Net cash from financing</b>	<b>369</b>	<b>494</b>	<b>596</b>	<b>(559)</b>	<b>(669)</b>
<b>Net change in cash</b>	<b>4,580</b>	<b>367</b>	<b>(82)</b>	<b>3,378</b>	<b>87</b>
Cash at beginning of the year	3,084	7,472	7,731	7,794	11,173
Exchange difference	(193)	(107)	146	0	0
<b>Cash at the end of the year</b>	<b>7,472</b>	<b>7,731</b>	<b>7,794</b>	<b>11,173</b>	<b>11,260</b>

### Balance sheet

YE 31 Dec (RMB mn)	FY20	FY21	FY22E	FY23E	FY24E
<b>Current assets</b>	<b>29,112</b>	<b>33,505</b>	<b>34,010</b>	<b>37,803</b>	<b>42,851</b>
Cash & equivalents	7,472	7,731	7,794	11,173	11,260
Account receivables	13,090	15,494	17,686	17,192	20,764
Inventory	4,928	6,810	5,818	6,671	7,960
Other current assets	3,622	3,469	2,712	2,767	2,867
<b>Non-current assets</b>	<b>7,483</b>	<b>10,551</b>	<b>11,488</b>	<b>11,322</b>	<b>11,215</b>
PPE	2,680	4,180	4,971	5,061	5,221
Intangible assets	482	673	635	378	112
Other non-current assets	4,321	5,698	5,882	5,882	5,882
<b>Total assets</b>	<b>36,595</b>	<b>44,056</b>	<b>45,498</b>	<b>49,125</b>	<b>54,066</b>
<b>Current liabilities</b>	<b>14,662</b>	<b>17,412</b>	<b>16,886</b>	<b>17,754</b>	<b>19,757</b>
ST borrowings	402	1,216	3,111	3,111	3,111
Account payables	9,703	11,803	9,309	10,277	11,905
Accrued expense	3,676	3,319	3,109	3,009	3,385
Other current liabilities	881	1,074	1,356	1,356	1,356
<b>Non-current liabilities</b>	<b>1,729</b>	<b>2,473</b>	<b>1,859</b>	<b>1,930</b>	<b>2,020</b>
LT borrowings	878	1,553	1,054	1,125	1,216
Other non-current liabilities	851	921	804	804	804
<b>Total liabilities</b>	<b>16,391</b>	<b>19,886</b>	<b>18,744</b>	<b>19,684</b>	<b>21,778</b>
Share capital	2,996	2,995	3,033	3,033	3,033
Capital surplus	1,990	2,940	3,860	3,860	3,860
Retained earnings	15,309	17,885	19,904	22,592	25,439
Other reserve	(521)	(201)	(568)	(568)	(568)
<b>Minority interest</b>	<b>431</b>	<b>553</b>	<b>524</b>	<b>524</b>	<b>524</b>
<b>Total equity</b>	<b>19,773</b>	<b>23,618</b>	<b>26,230</b>	<b>28,917</b>	<b>31,764</b>
<b>Total liabilities and equity</b>	<b>36,595</b>	<b>44,056</b>	<b>45,498</b>	<b>49,125</b>	<b>54,066</b>

### Key ratios

YE 31 Dec	FY20	FY21	FY22E	FY23E	FY24E
<b>Revenue mix</b>					
Domestic	60%	59%	53%	56%	54%
Overseas	40%	41%	47%	44%	46%
<b>Growth (%)</b>					
Domestic	-3%	21%	-12%	6%	10%
Overseas	8%	29%	10%	-5%	20%
Revenue	1%	24%	-3%	1%	14%
Gross profit	5%	13%	-8%	4%	15%
Operating profit	-1%	15%	-30%	44%	10%
EPS	23%	-13%	-18%	20%	9%
<b>Profit &amp; loss ratio (%)</b>					
Gross margin	43%	39%	37%	38%	38%
Operating margin	11.6%	10.7%	7.8%	11.1%	10.7%
Net profit margin	14.7%	10.3%	8.8%	10.5%	10.0%
<b>Balance sheet ratio</b>					
Current ratio (x)	1.99	1.92	2.01	2.13	2.17
Receivable turnover days	182	159	190	199	189
Inventory turnover days	60	65	72	71	73
Payable turnover days	123	120	121	112	110
Net debt to equity	net cash	net cash	net cash	net cash	net cash
<b>Profitability (%)</b>					
ROE	22.0%	15.6%	11.2%	12.2%	12.0%
ROIC	24.0%	23.1%	11.5%	14.5%	15.9%
<b>Per share data (RMB)</b>					
EPS (RMB)	1.30	1.13	0.92	1.11	1.20
DPS (RMB)	0.13	0.27	0.27	0.22	0.26
BVPS (RMB)	6.60	7.89	8.65	9.53	10.47

Source: Company data, CMBIS estimates

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