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Asia Humanoid & Physical AI

Group meeting takeaways: Humanoid sector progress and watchpoints in China and Korea

Korea Auto, Robotics, Battery and Utility

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Our Asia Robotics analysts (Karen Li, Sonny Lee, Sunny Su) hosted a group meeting with Asia-based investors. In China, we see component progress running ahead of n. Leader Drive is a clear actuator beneficiary, in our view, while Orbbec/Mech-Mind argue perception (3D vision, AI recognition) could monetize earlier than broad humanoid rollouts via task-specific physical AI. In Korea, debates center on cost and customer concentration: Mobis is positioned as Hyundai Motor Group's (HMG) key actuator supplier from 2028; Robotis stands out for diversified customers and R&D-to-production stickiness, with Uzbekistan production slated for late 1Q27/early 2Q27 to narrow the cost gap vs. China. OEM capacity targets are rising faster than use-case readiness (China skewed to data collection; Tesla Optimus now 10-20k units pre-external sales late-2027; HMG 30k capacity scaling from 2028 with meaningful assembly post-2030). We believe investors will focus on the timing of real industrial capability, proof of scalable unit economics, and translation of capacity into revenue/margins; key catalysts include Tesla/China execution, HMG 4Q26 investment plans, CES 2027, and Robotis' Uzbekistan ramp. Our pecking order in China: Unitree > Leader Drive > Orbbec (OW) > UBTech (N). Korea: HMC/Kia = Robotis > Mobis (OW) > Mando (N).

- **China: component progress outpacing humanoid n.** Leader Drive stands out as a key beneficiary of humanoid scaling, with humanoid-related products reportedly contributing ~40% of revenue and a plan to expand capacity by ~10x over three years, while moving toward more integrated actuator solutions that combine multiple reducer technologies with electric motors. Orbbec and Mech-Mind also highlighted that perception technologies such as 3D vision and AI-driven recognition may be commercialized ahead of broad humanoid deployment, with task-specific physical AI solutions likely to see earlier industrial demand (link to our CIIF takeaway note).
- **Korea: manufacturing costs and customer concentration are the core debates.** Mobis is positioned as HMG's key actuator supplier starting in 2028 and is considering a US actuator manufacturing footprint near the Georgia humanoid plant. The company is also co-developing dexterous hand modules, with the latest concept moving to a four-finger, 13-DOF configuration that could enable powertool use and expand content per robot beyond ~30 body actuators. Meanwhile, we see Robotis as differentiated through its R&D-to-production customer relationships and broader end-customer base. The Uzbekistan hub is expected to start production in late 1Q27 or early 2Q27, which should improve Robotis' cost position compared with Chinese peers.
- **Humanoid OEM target and progress**
  - **Chinese OEMs** including Unitree, UBTECH, and AgiBot are ramping capacity quickly, but use cases observed at CIIF appeared basic, suggesting near-term production is still skewed toward data collection and training rather than high-ROI customer deployments. During the 2026 World Physical AI Conference in Hangzhou, however, Unitree founder/CEO

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Wang Xingxing pulled forward his outlook for a physical-AI breakthrough from "up to 10 years" to "2-3 years" or even "1-2 years." (link)

- **Tesla** Optimus production expectations ranged widely (~15k-50k units), which turned out to be 10-20k units before launching external sales targeted for late-2027 (link).
- **HMG** targets 30k units of annual capacity from 2028, with initial deployment focused on simpler tasks, while more economically meaningful assembly use cases are likely to scale beyond 2030.
- **Samsung Electronics** is also reportedly pursuing separate humanoid development efforts beyond its Rainbow Robotics investment (link), where any unexpected product reveal could be a sentiment catalyst.

- **Investor sentiment: three questions dominate.** The market is increasingly focused on: 1) when humanoids can demonstrate commercially meaningful industrial capability; 2) which companies can translate production into revenue and margin expansion; and 3) what evidence validates scalability and attractive unit economics. Key catalysts include: 1) Tesla Optimus progress through 2027; 2) China's ability to convert production into deployments in 2027-28; 3) HMG's manufacturing investment announcements in 4Q26; 4) CES demonstrations and potential new OEM entrants in early 2027; and 5) Robotis' Uzbekistan ramp in 1H27.
- **Stock preference: execution will matter more than announcements.** We expect the next re-rating to be driven by real manufacturing ramps, confirmed orders, and improving unit economics rather than headline capacity targets. In China, our preference order is Unitree (OW) > Leader Drive (OW) > Orbbec (OW) > UBTech (N), favoring names with a nearer-term timeline of physical-AI breakthrough and scarcity premium. In Korea, we prefer HMC/Kia (both OW) as OEM picks, and Robotis (OW) as our top component pick, followed by Mobis (OW) and Mando (N).

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Companies Discussed in This Report (all prices in this report as of market close on 27 October 2026, unless otherwise indicated)
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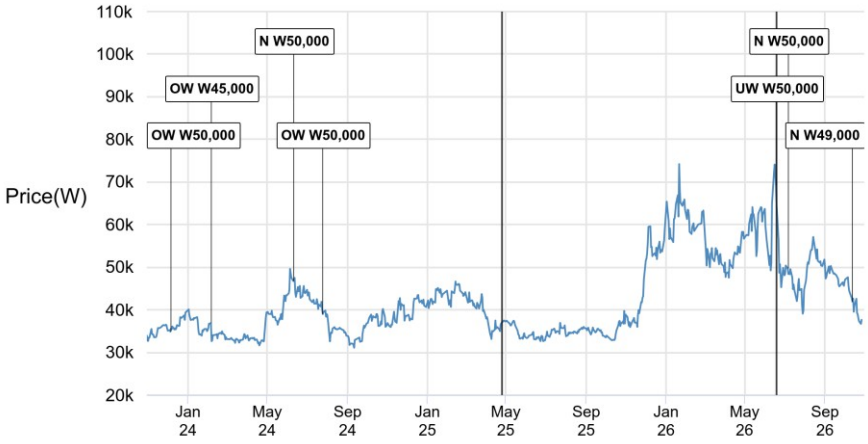
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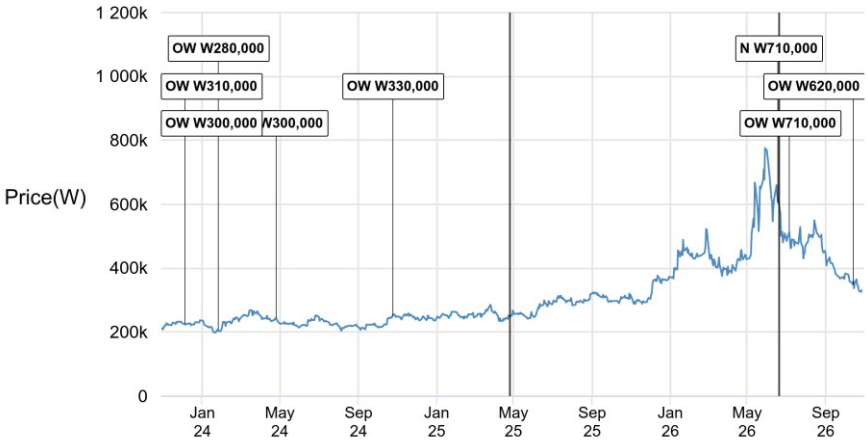
HL Mando (204320.KS, 204320 KS) Price Chart



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Initiated coverage Oct 07, 2014. All share prices are as of market close on the previous business day.
Break in coverage Apr 25, 2025 - Jun 19, 2026.

Date	Rating	Price (W)	Price Target (W)
06-Dec-23	OW	34900	50,000
06-Feb-24	OW	36850	45,000
11-Jun-24	N	46750	50,000
26-Jul-24	OW	39000	50,000
19-Jun-26	UW	69200	50,000
07-Jul-26	N	49700	50,000
14-Oct-26	N	41900	49,000

Hyundai Mobis (012330.KS, 012330 KS) Price Chart



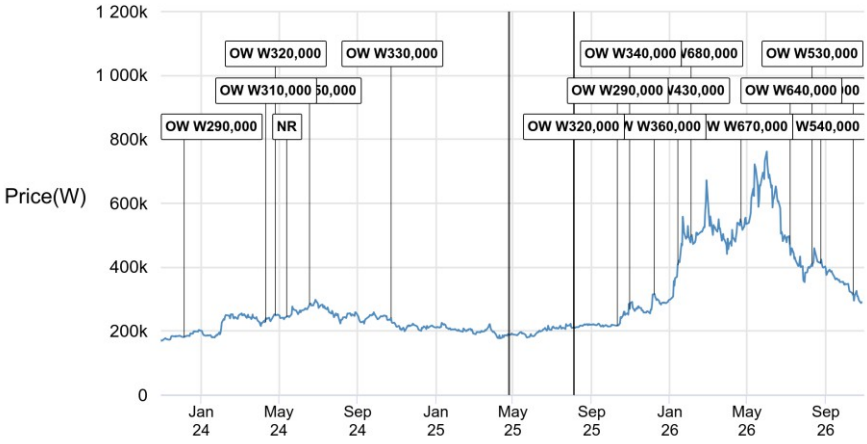
Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage May 02, 2001. All share prices are as of market close on the previous business day.
Break in coverage Apr 25, 2025 - Jun 19, 2026.

Date	Rating	Price (W)	Price Target (W)
28-Oct-23	OW	220000	300,000
06-Dec-23	OW	225000	310,000
26-Jan-24	OW	209500	280,000
26-Apr-24	OW	244000	300,000
25-Oct-24	OW	250000	330,000
19-Jun-26	N	606000	710,000
07-Jul-26	OW	512000	710,000
14-Oct-26	OW	349000	620,000

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Hyundai Motor Company (005380.KS, 005380 KS) Price Chart



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Initiated coverage Jun 14, 2000. All share prices are as of market close on the previous business day.
Break in coverage Apr 25, 2025 - Aug 04, 2025.

Date	Rating	Price (W)	Price Target (W)
06-Dec-23	OW	181400	290,000
11-Apr-24	OW	228000	310,000
26-Apr-24	OW	250000	320,000
14-May-24	NR	245000	--
19-Jun-24	OW	283000	350,000
24-Oct-24	OW	241000	330,000
04-Aug-25	OW	210000	320,000
11-Oct-25	OW	217000	290,000
31-Oct-25	OW	269000	340,000
08-Dec-25	OW	314500	360,000
14-Jan-26	OW	406500	430,000
04-Feb-26	OW	494500	680,000
23-Apr-26	OW	540000	670,000
08-Jul-26	OW	471000	640,000
11-Aug-26	OW	409000	530,000
25-Aug-26	OW	412500	540,000
14-Oct-26	OW	314500	440,000

Kia Corp (000270.KS, 000270 KS) Price Chart

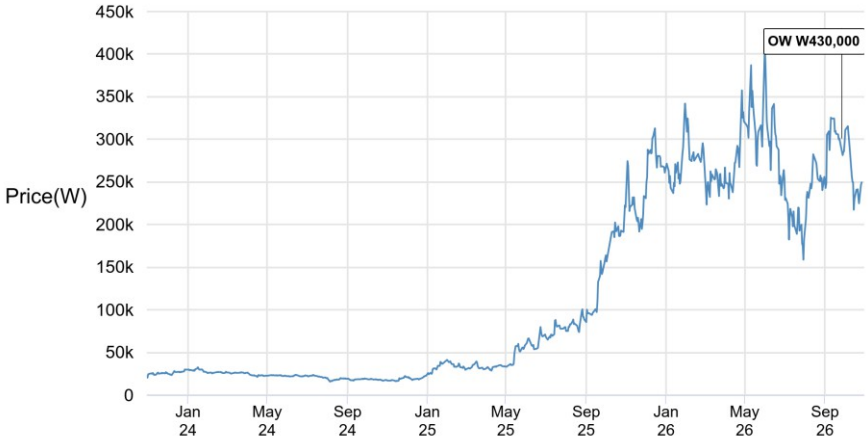


Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Jun 14, 2000. All share prices are as of market close on the previous business day.
Break in coverage Apr 25, 2025 - Aug 04, 2025.

Date	Rating	Price (W)	Price Target (W)
06-Dec-23	OW	84100	130,000
11-Apr-24	OW	108000	140,000
27-Apr-24	OW	118200	160,000
25-Oct-24	OW	90900	150,000
04-Aug-25	OW	100800	140,000
11-Oct-25	OW	100600	130,000
31-Oct-25	OW	117300	150,000
14-Jan-26	OW	135900	190,000
28-Jan-26	OW	154200	180,000
04-Feb-26	OW	154300	260,000
07-Apr-26	OW	153000	240,000
08-Jul-26	OW	152700	260,000
11-Aug-26	OW	135200	200,000
25-Aug-26	OW	131300	210,000
14-Oct-26	OW	108000	180,000

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Robotis (108490.KQ, 108490 KS) Price Chart



Date	Rating	Price (W)	Price Target (W)
28-Sep-26	OW	301000	430,000

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Initiated coverage Sep 28, 2026. All share prices are as of market close on the previous business day.

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