

WiSig Networks Opens Commercial Orders for Its Made-in-India O-RAN 32TR Massive MIMO ULPI Radio at India Mobile Congress 2026

Supporting both ULPI Class A & Class B, the radio places WiSig among the very few companies worldwide ready to supply 32TR massive MIMO built to the O-RAN ALLIANCE's Uplink Performance Improvement standard; volume shipments planned for 2027

NEW DELHI, October 8, 2026 — WiSig Networks Pvt. Ltd., a Hyderabad-based 5G deep-tech communications company, today announced that its O-RAN compliant 32TR Massive MIMO ULPI Radio Unit is now available for commercial orders, with volume shipments planned for 2027. First unveiled at MWC Barcelona in March 2026, the radio is designed for operators that need stronger uplink performance and wider cell-edge coverage in mid-band 5G. WiSig is showcasing the radio, together with its complete 5G Standalone solution, at India Mobile Congress 2026.

ULPI: a key enhancement for Open RAN massive MIMO

Uplink Performance Improvement (ULPI) is an important enhancement to the O-RAN ALLIANCE's 7.2x Open Fronthaul interface for massive MIMO. With ULPI, the O-RU performs uplink channel estimation from demodulation reference signals (DMRS) and uses it to compute beamforming weights. Equalization is then performed in the O-RU (Class A) or in the O-DU (Class B). This addresses key uplink performance limitations of earlier open massive MIMO radios, particularly at the cell edge.

Accelerates migration towards multi-vendor RAN

The launch comes as multi-vendor Open RAN reaches important commercial milestones. In October 2025, AT&T completed a call over its commercial network using third-party radios. In September 2026, NTT DOCOMO began commercial operation of a new generation of O-RAN-compliant base station equipment connected to radio units from multiple vendors, extending its established multi-vendor O-RAN approach. As operators open their networks to more suppliers, demand is growing for independent, standards-compliant massive MIMO radios with strong uplink performance. WiSig's 32TR ULPI radio is built for that opportunity.

Product highlights

- 32 transmit / 32 receive massive MIMO in n78; further band variants are in development
- Support for both ULPI Class A (equalization in the O-RU, minimising fronthaul bandwidth) and ULPI Class B (equalization in the O-DU, enabling advanced receivers and joint processing)
- SU-MIMO and MU-MIMO operation, with up to 16 aggregate spatial layers in the downlink and up to 8 aggregate spatial layers in the uplink
- Built on Altera Agilex FPGAs, running WiSig's proprietary and patented ULPI algorithms
- Part of a complete 5G SA solution, including WiSig's DU-CU baseband, supporting ULPI on the O-RU–O-DU fronthaul interface and field-validated for mobile broadband and Fixed Wireless Access

Commercial availability

WiSig is now accepting commercial orders for the 32TR Massive MIMO ULPI radio and is currently negotiating supply agreements with operators and partners in India and overseas. Volume shipments are planned for 2027.

Prof. Kiran Kuchi, Founder, WiSig Networks, and Professor, IIT Hyderabad said, “This radio is the result of years of research in massive MIMO and uplink receiver algorithms at IIT Hyderabad and WiSig. Our work began well before ULPI was standardised. It was advanced with R&D funding from IIITB COMET Foundation, supported by the Department of Science and Technology’s NM-ICPS mission, and engineered into a carrier-grade product by the WiSig team. Because that research foundation was already in place, we were able rapidly productize the new specification into a radio that supports both ULPI classes. We are proud to take deep innovation from India to global commercial deployment.”

Christian Lanzani, General Manager, Wireless, Altera said, “Since WiSig unveiled its production MIMO radios with Altera at MWC26, we have seen strong operator interest in programmable, ULPI-ready massive MIMO. WiSig’s move to commercial ordering shows how Agilix 7 FPGAs combined with Altera’s radio solution stacks such as “Olympia Bridge” help innovative radio companies bring advanced uplink processing to market quickly and accelerate open, multi-vendor 5G deployments worldwide”

See it at IMC 2026 : Live demonstrations of the 32TR Massive MIMO ULPI radio and the full 5G SA solution will run at Hall 2, Booth D33, Yashobhoomi, New Delhi, 7–10 October 2026.

About WiSig Networks

WiSig Networks Pvt. Ltd., incubated at IIT Hyderabad, designs and builds O-RAN compliant massive MIMO radios, cloud-native 5G baseband, 5G core and NTN/NB-IoT silicon. Its patented portfolio spans waveform design, massive MIMO, ULPI, Open RAN and 6G technologies. For more information, visit www.wisig.com, connect at kkuchi@wisig.com

About IIT Hyderabad:

IITH, established in 2008, has reached a respectable position in academics, research, technology development, and Startups in a short span of 17+ years. In the National Institutional Ranking Framework (NIRF-2025), IITH is ranked 7th among Engineering institutes (crossing a first-generation IIT this year), and is ranked 6th in Innovation, while it has maintained its rank within the top 10 Engineering Institutes ever since NIRF was launched. IITH is ranked 588th in the QS World University Rankings 2027 and 270th in the QS Asian University Rankings 2026 (123rd globally in citations per faculty). IITH has recorded a major leap in the QS World University Rankings by Subject 2026, entering the global Top 400 in Engineering & Technology with a rank of 395, marking a sharp improvement from the 501–550 band in 2025. IITH secured 46 positions by 31 faculties in the Stanford /Elsevier Global Top 2% Scientists list 2025 across two categories. IITH has been striving for excellence with its vision of "Inventing & Innovating in Technology for Humanity," guided by its newly adopted Sanskrit Motto, "नवोन्मेषेण देशनिर्माणम्" (Nation Building through Innovation).

With 355+ full-time Faculty, 350+ non-teaching Staff and 6110+ Students (PG + PhD students accounting for about 60%), IITH has a strong research focus with 5980+ R&D Projects worth of Rs. 1880+ Cr (Rs. 245+ Cr funding in 2025-26), 14,340+ Publications, 2,95,540+ Citations, 167 h-index, 830+ Patents, 450+ granted patents (250 Patents in 2025, i.e., almost a patent on every working day in 2025), and 300+ Start-ups (that have generated 1100+ jobs with a revenue of Rs. 1500+ Cr).

The thrust areas of research at IITH are: Next-Generation Telecommunications, Autonomous Navigation, Robotics & Intelligent systems, Semiconductors & Devices, Additive Manufacturing, Advanced Materials & Critical Minerals, Materials characterisation, Catalysis, Healthcare, Energy, Sustainability, Climate Change, Smart Mobility, EV technology, Quantum technologies, Nuclear Energy, Computational Engineering, Design, AR/VR, Waste management, and Rural development.