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Motorica introduces worldâ??s first bionic hand prosthesis powered by optical sensors

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Omni Hand represents a new level of human-technology interaction



Motorica, a global MedTech company specialising in assistive technologies and medical cybernetics, has unveiled Omni Hand, world's first bionic hand prosthesis equipped with optical myography (OMG) sensors. The launch marks a major leap forward in human–technology interaction and intuitive prosthetic control.

Moving beyond the limitations of traditional muscle-signal prosthetics, the Omni Hand leverages optical sensors to capture minute changes in tissue light transmittance caused by the movement of muscles and tendons. By interpreting these subtle variations in real time, the prosthesis translates even the smallest impulses into natural, precise motion.

This breakthrough extends the benefits of advanced prosthetics to individuals with limited muscle activity, such as those recovering from electrical injuries, frostbite, or trauma, making intuitive and responsive control accessible to a wider spectrum of users.

While optical sensing in prosthetics has long remained within the realm of research, Cyber Motorica has become the first company to translate this breakthrough into real-world use. The successful pilot rollout, with the first eight users already integrating Omni Hand into their daily lives, marks a significant step forward in practical adoption and user experience. With mass production planned for 2026, the company is poised to make advanced, intuitive prosthetic control accessible to users on a global scale.

In 2025, Motorica opened its first office in New Delhi. In India, it already collaborates closely with over 25 clinics across key states, including Delhi NCR, Maharashtra, Karnataka, Uttar Pradesh, Tamil Nadu, as well as in several other regions nationwide.