

NEC Develops Wideband Wearable Antenna Prototype

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NEC Corp. today announced the successful development of a wideband wearable antenna.

The wideband wearable antenna is an antenna that uses a conductive fabric which can be attached to clothing and other items, or folded up for easy carrying. It is a high-performance mobile antenna that can act as a supplementary antenna in areas with poor reception.

Antennas are generally designed to operate in an open space, and if used in close proximity to a human body or other object, the impedance deteriorates, causing a noticeable reduction in performance. This antenna is designed to demonstrate equally good impedance characteristics whether used in an open space or close to a human body, for example when attached to the user's clothing.

One of the difficulties encountered in the past when using conductive fabrics was that soldering was not possible. In the case of this new antenna, power is supplied to a small flexible print substrate by a soldered coaxial cable, so that power supply is possible through capacity coupling with the substrate.

NEC will first test reception of digital terrestrial broadcasts in the 470-770 MHz band. Later, it will test the potential of this antenna as an external antenna for terminals in the future, conducting ongoing development while studying potential future applications.

Source: NEC

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