

Remote Field Doctor Kit with Medical Transmission Over LoRa

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Abstract: *One of the biggest issues facing the world today is access to healthcare in rural and isolated areas. To overcome this difficulty, the Remote Field Doctor Kit with Medical Transmission over LoRa combines long-range wireless communication with biomedical sensors. Vitals like blood pressure, heart rate, body temperature, and SpO₂ are gathered by the system and sent to a physician's monitoring unit via LoRa (Long Range Radio) technology. In contrast to telemedicine systems based on GSM, Wi-Fi, or Bluetooth, LoRa offers low-power, long-distance communication (up to 10 km in rural areas) with little infrastructure. This makes it possible for medical professionals to keep an eye on patients from a distance and give prompt advice without needing internet access. The project shows that a dependable, affordable, and scalable healthcare system for underprivileged areas is feasible.*

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