

## **PDEOZE PowerContainer**

# **Indonesia 5G communication base stations are far away**



## Overview

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How many 5G base stations are there in Indonesia?

Most 5G deployments are still confined to urban centers, leaving large parts of Indonesia's vast geography underserved. For example, Telkomsel has launched only 2,200 5G base stations in 56 cities, out of a total footprint of more than 240,000 base stations. Despite the focus on 5G, Indonesia remains a 4G-first market.

Does Indonesia have a 5G network?

In Indonesia, 5G rollout is progressing, with commercial services launched by Telkomsel, Indosat Ooredoo and XL Axiata since 2021, utilising existing spectrum holdings in the 1800 MHz, 2.1 GHz and 2.3 GHz bands. As of the end of 2024, 5G networks covered 26.3% of Indonesia's population, or around 15.7 million 5G connections.

What is the 5G penetration rate in Indonesia?

Since its launch in 2021, the 5G penetration rate in Indonesia has only reached 2 percent. According to the Kearney report, this low penetration is due to limited infrastructure, such as the minimal number of transmitter stations, inadequate fiber optic networks, and limited frequency availability.

How many GHz will Indonesia use for 5G?

Plan for the use of 4.8 GHz and the entire upper 6 GHz (6.425–7.125 GHz) bands to support further development of 5G. The additional 700 MHz in the upper 6 GHz band will go a long way to addressing Indonesia's mid-band needs.

Does Indonesia need 5G spectrum resources?

Much work must be done to ensure adequate spectrum resources to support 5G development in Indonesia, especially in the crucial mid-band range (1–7 GHz). The GSMA estimates that mid-band 5G spectrum will drive an increase

of more than \$610 billion in global GDP in 2030, almost 65% of the overall socio-economic value generated by 5G.

Why is 5G a problem in Indonesia?

Spectrum constraints. Indonesia's mobile ecosystem is constrained by insufficient and fragmented mid-band spectrum\*, which is essential for 5G's optimal performance: Only 360MHz of mid-band spectrum is currently assigned for mobile use—less than half of the APAC average of 850MHz.

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Recent developments in Indonesia could potentially revive a stagnant 5G industry for the country. This ABI Insight takes a deeper look at the impact of these developments and how operators ...

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