

Wireless signal repeater recommendation

Given the increased need for wireless network access, libraries are advised to promote their wireless networks as reliable, high-speed networks available 24/7 as far as the signal can reach. For many libraries, the lattermost part of that statement is the most problematic. The Maine State Library recommends for libraries to consider a wireless signal repeater to best extend their wireless networks past the physical boundaries of the library walls and into the nearby spaces that users can conveniently use to access the network.

Investigating the top-reviewed repeaters of the latest models, I specifically looked for certain qualities:

- Easy to install and configure. It may be difficult to implement any solution that requires a high degree of technical know-how, so the simpler, the better.
- Will minimally impact the library's existing infrastructure. Preferably, nothing requiring additional cabling or power conduits, or an external (weather-resistant) housing.
- Best range. Repeaters can have external or internal antennas to push out the signal they are repeating, but external antennas will push out more in a horizontal direction, and so are better for breaching dense materials like walls.
- Compatibility. Given the wide range of wireless access points, having a repeater that is as universally-compatible as we can find makes good sense, as does one that can support newer wireless technologies.
- Available as new from resellers, and preferably as low cost as possible.

Based on the above criteria, I'm prepared to recommend the following device:

TP-Link AC2600 WiFi Extender (https://www.amazon.com/dp/B01MR90E3A/ref=emc_b_5_t?th=1)
Currently selling for \$110 from Amazon.

This solution makes the most sense for small, rural libraries that have a single wireless access point, generally centralized to maximize the signal inside the library walls. The repeater could be plugged into any AC outlet closest to the area where improved coverage is needed.

It's not a one-size-fits-all-libraries solution, and so for libraries that might have different requirements for their wireless networks, I am happy to offer further guidance.

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