



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

PBWA

PORTABLE BROADBAND WIRELESS
ACCESS SYSTEM



DESCRIPTION

The Portable Wireless Broadband Access (PWBA) system is an integration of wireless system and modem router that could function as the core system to provide or create a Wireless Local Area Network (WLAN). The PWBA system is equipped with wireless modem which allows it to connect to an Internet Service Provider (ISP), along with self-developed management software to allow it to function as a managed router. In current form, the PWBA is capable of connecting to cellular data networks using 3G technology or High Speed Packet Access (HSPA+). It then acts as a WiFi Access Point (AP) or wireless hotspot, using the unlicensed Industrial, Scientific, and Medical (ISM) 2.4 GHz Radio Band and can be used for either indoor or outdoor applications.

Needs

- a) Polarisation.
- b) Bandwidth enhancement technique.
- c) Using a monopole antenna.
- d) Can also be powered using solar power due to low power requirements.

Application

The main targets of this product is public transportation industry, mainly buses and trains or in locations where mobile broadband access via WiFi is required. The intention of this product is the need of internet connection during travel for the consumers and can act as a premium service provided by the buses to the travelers to attract more crowds.

Benefits

- a) Can operate on battery power.
- b) Can be used for indoor and outdoor application.
- c) Operation modes using hotspot and an access point.
- d) The product is a hotspot.
- e) Low power consumption.

Targeted Market

- a) Telecommunication operators.
- b) Broadband service providers.
- c) Public transportation.
- d) Traveler.
- e) Ceremony and Exhibition hall.



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