



Panel Session:

PLC Standardization

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- Currently most of PLC standard in China are compatible with international standards
- GB/T 19882.211-2010
Automatic meter reading system - Part 211:
Distribution line carrier meter reading system
- System requirements
- GB/T 7329-2008
Coupling devices for power line carrier
systems



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- DL/T 395-2010
Technical requirements for broadband access system of low voltage power line communication
- DL/T 1124-2009
Digital power-line carrier terminals
- DL/T 546-2012
Power-line carrier communication operation and management procedures
- DL/T 5189-2004
Technical code for designing power line carrier communication





National standard and industry standard

- Smart grid communication technical requirement
- Broadband access system
- EV charging communication technical requirement



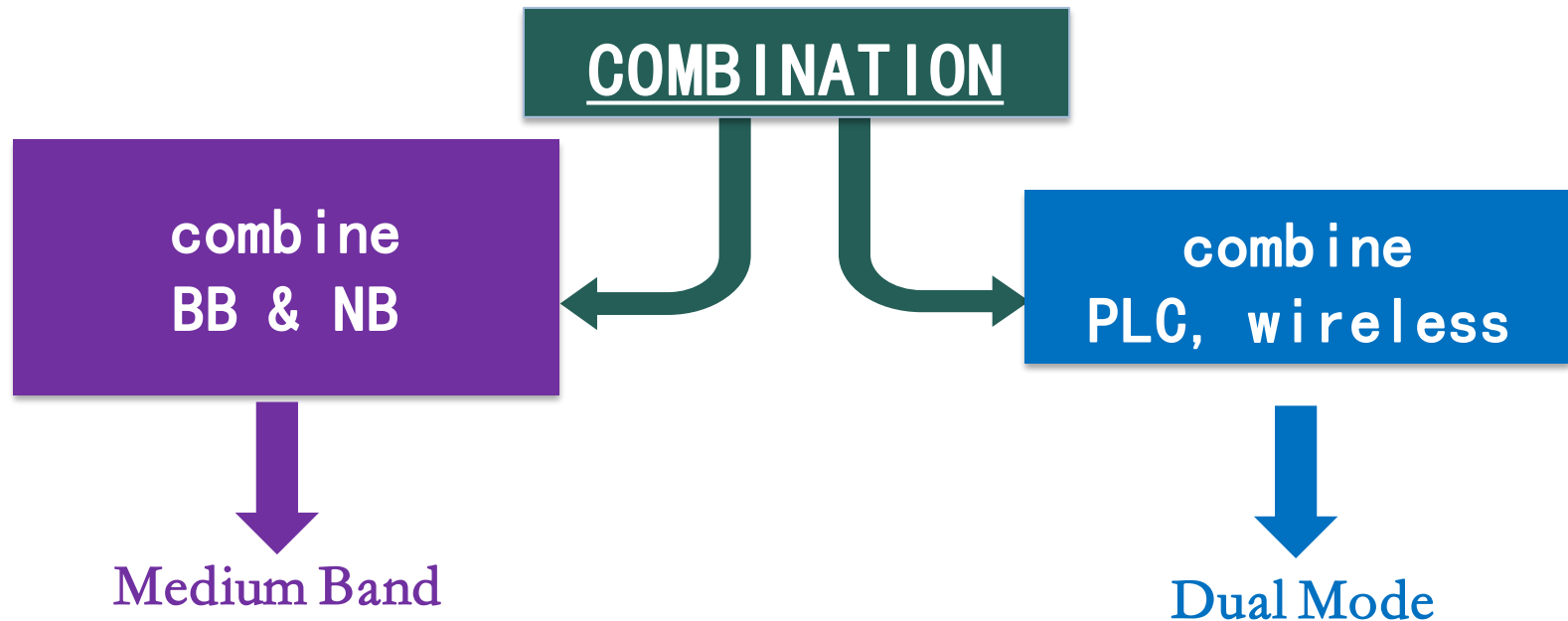
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Cost effective

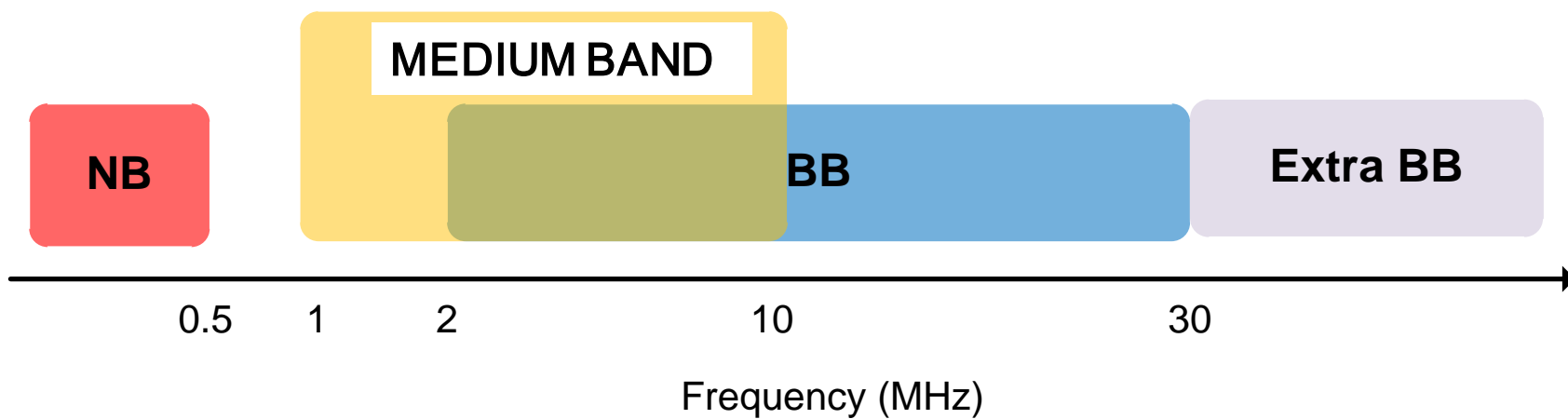
High performance



- frequency band: 1 ~ 10MHz (the most efficient band)
- PHY data rate: 10 Mbps
- low cost, low power consumption
- robust, high success rate

- 2 or more solutions integrated
- automatically switch to another mode when current mode fails
- cost is an important thing that must be taken into consideration

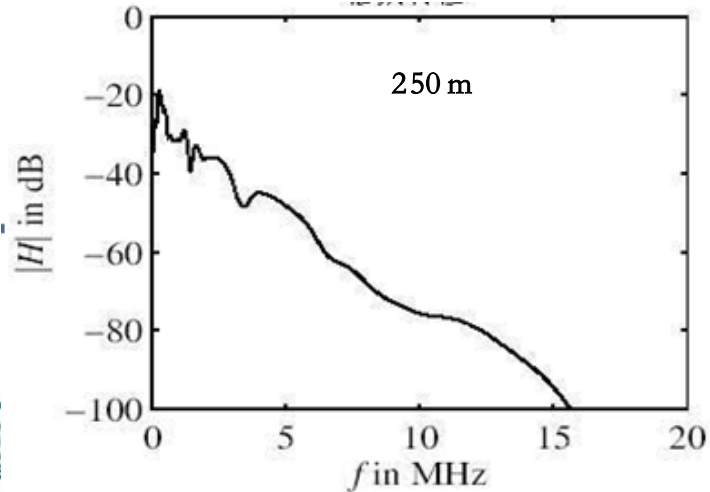
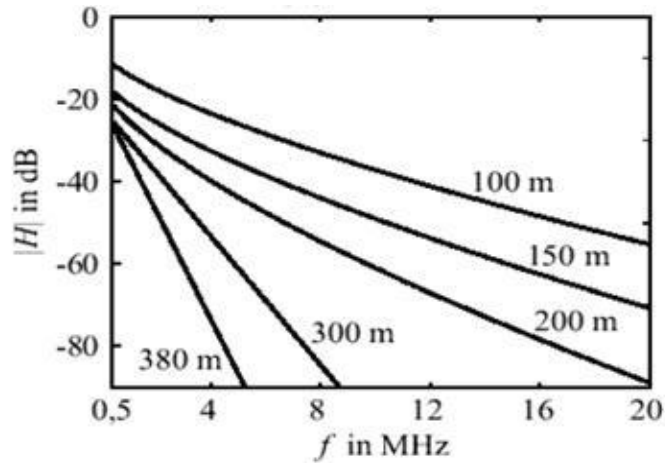
What's Medium Band



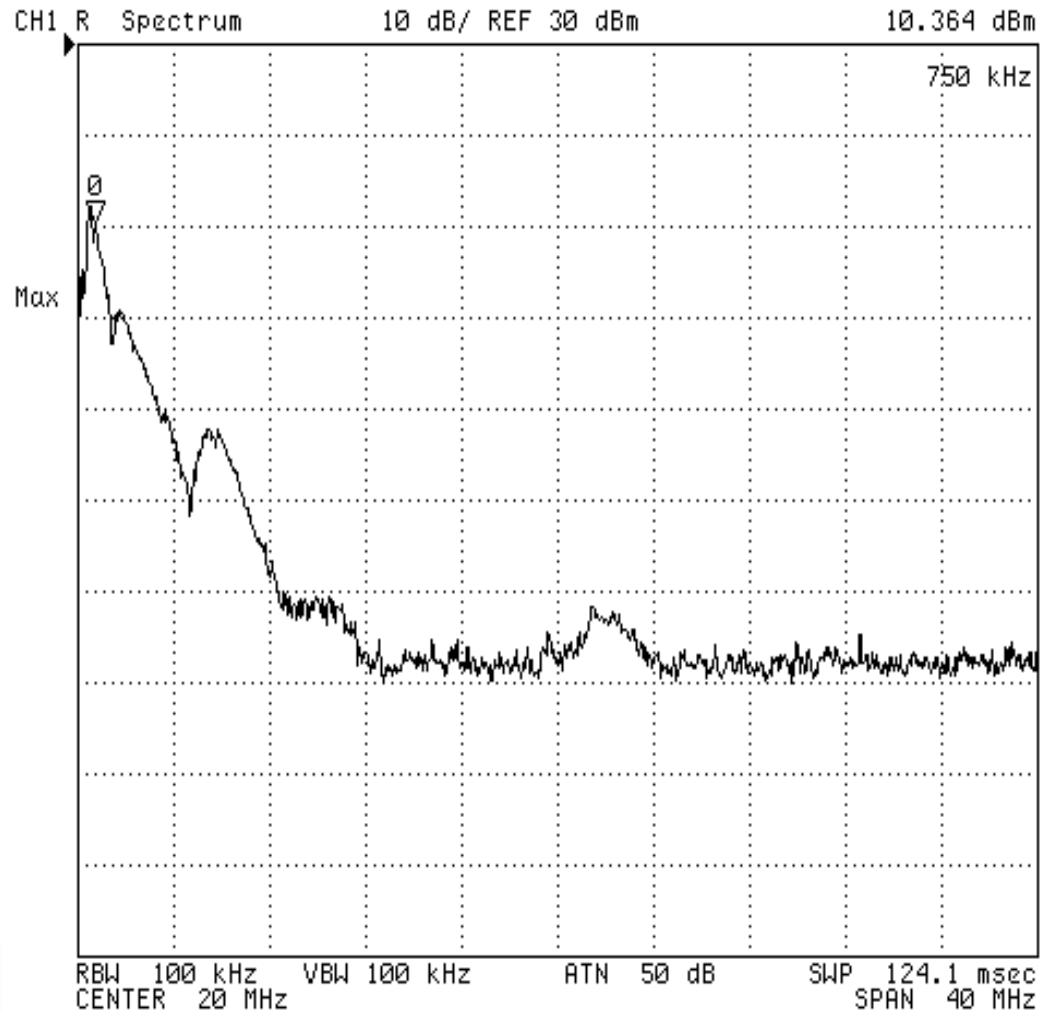
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Why Medium Band



Attenuation



Noise

Why Medium Band PLC



	Frequency Band	Advantages	Disadvantages
Broad Band	2-30MHz	<ul style="list-style-type: none">• High data rate,• Stable,• Better noise tolerance	<ul style="list-style-type: none">• High cost ,• High power consumption,• Big IC size
Narrow Band	3-500kHz	<ul style="list-style-type: none">• Low cost,• Low power consumption• Small IC size	<ul style="list-style-type: none">• Low data-rate,• Instable and vulnerable to noises
Medium Band	1-10MHz	<ul style="list-style-type: none">• Balance between cost and performance,• efficient for smart grid applications	<ul style="list-style-type: none">• Less field trial verifications, not standardized





- Subordinated corporation of SGCC, Fibrlink undertakes the telecommunication network's construction, maintenance and operation for SGCC, and also provide total solutions of power informatization for power enterprise.
- The world biggest PLC access operator, FIBRLINK has BPLC access customer over 140,000, cover 8000 buildings and 1,000,000 households.

● Network Construction

● Communication Operations

● Power IT



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Thank you!



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