

What we claim is:

1. A wireless communication method, comprising:

determining, by a terminal device, a reference uplink signal of a target uplink signal;

determining, by the terminal device, a transmission power of the target uplink signal

5 according to a transmission power of the reference uplink signal; and

transmitting, by the terminal device, the target uplink signal by using the determined transmission power; wherein the target uplink signal is a Phase Tracking Reference Signal, PTRS, the reference uplink signal is a Physical Uplink Shared Channel, PUSCH, transmitted on a Demodulation Reference Signal, DMRS, port associated with the PTRS.

10 2. The method of any one of claim 1, wherein the target uplink signal and the reference uplink signal satisfy a specific relationship on at least one of a frequency domain transmission resource, a time domain transmission resource, a transmission port and a transmission beam.

3. The method of claim 2, wherein the target uplink signal and the reference uplink signal are transmitted on a same carrier or adjacent carriers.

15 4. The method of claim 2, wherein the target uplink signal and the reference uplink signal are transmitted through a same port.

5. The method of claim 2, wherein the target uplink signal and the reference uplink signal are transmitted through a same beam

20 6. The method of any one of claims 1 to 5, wherein determining, by the terminal device, the transmission power of the target uplink signal according to the transmission power of the reference signal uplink signal, comprises:

obtaining, by the terminal device, the transmission power of the target uplink signal based on the transmission power of the reference uplink signal and an offset.

25 7. The method of claim 6, wherein the offset is notified to the terminal device by a network device through an upper-layer signaling or a DCI signaling.

8. A terminal device, comprising a processing unit and a communication unit;

wherein the processing unit is used for determining a reference uplink signal of a target

uplink signal, and determining a transmission power of the target uplink signal according to a transmission power of the reference uplink signal; and

the communication unit is used for transmitting the target uplink signal by using the transmission power determined by the processing unit; wherein the target uplink signal is a
5 Phase Tracking Reference Signal, PTRS, the reference uplink signal is a Physical Uplink Shared Channel, PUSCH, transmitted on a Demodulation Reference Signal, DMRS, port associated with the PTRS.

9. The terminal device of claim 8, wherein the target uplink signal and the reference
10 uplink signal satisfy a specific relationship on at least one of a frequency domain transmission resource, a time domain transmission resource, a transmission port and a transmission beam.

10. The terminal device of claim 9, wherein the target uplink signal and the reference uplink signal are transmitted on a same carrier or adjacent carriers.

11. The terminal device of claim 9, wherein the target uplink signal and the reference uplink signal are transmitted through a same port.

15 12. The terminal device of claim 9, wherein the target uplink signal and the reference uplink signal are transmitted through a same beam.

13. The terminal device of any one of claims 8 to 12, wherein the processing unit is further used for obtaining the transmission power of the target uplink signal based on the transmission power of the reference uplink signal and an offset.

20 14. The terminal device of claim 13, wherein the offset is notified to the terminal device by a network device through an upper-layer signaling or a DCI signaling.