CLAIMS

What is claimed is:

1. A method for measuring sidelink reference signal received power, executed by a terminal and comprising:

determining a measurement port for a sidelink reference signal based on sidelink control information SCI; and

obtaining reference signal received power based on the determined measurement port;

wherein in a case of multi-port transmission and/or multi-layer transmission, the measurement port is any one of:

all ports configured for sidelink transmission;

one or more of all ports configured for sidelink transmission; or

a port 1000 and a port 1001 for sidelink transmission;

or

wherein in a case of single-port transmission and/or single-layer transmission, the measurement port is any one of:

a port with a smallest port number;

a port with a largest port number;

a port with a preconfigured port number; or

a port 1000 for sidelink transmission.

2. The method for measuring sidelink reference signal received power according to claim 1, wherein the measurement port is any one of the following:

a measurement port determined based on sidelink configuration information; and

a predefined measurement port.

3. The method for measuring sidelink reference signal received power according to claim 2, wherein the sidelink configuration information comprises at least one of the following:

physical sidelink shared channel PSSCH configuration information;

reference signal configuration information; and

physical sidelink control channel PSCCH configuration information.

4. The method for measuring sidelink reference signal received power according to claim 1, wherein the one port is any one of the following:

a port with a smallest port number;

a port with a largest port number; and

a port with a preconfigured port number.

5. The method for measuring sidelink reference signal received power according to claim 1, wherein the reference signal received power comprises L1 RSRP, and if the measurement port is a plurality of ports and the plurality of ports use a code division multiplexing mode, the L1 RSRP is any one of the following:

being obtained by first combining and then averaging RSRP measurement values of the plurality of ports;

being obtained by first averaging and then combining RSRP measurement values of the plurality of ports; and

being obtained by multiplying an RSRP measurement value of one of the ports by a preset coefficient.

6. The method for measuring sidelink reference signal received power according to claim 1, wherein the reference signal received power comprises L1 RSRP, and if the measurement port is a plurality of ports and the plurality of ports use a time division multiple access or frequency division multiple access multiplexing mode, the L1 RSRP is an average value of RSRP measurement values of the plurality of ports or an RSRP measurement value of one of the plurality of ports.

7. The method for measuring sidelink reference signal received power according to claim 6, wherein the one of the plurality of ports is any one of the following:

a port with a smallest port number among the plurality of ports;

a port with a largest port number among the plurality of ports; and

a port with a preconfigured port number among the plurality of ports.

8. The method for measuring sidelink reference signal received power according to claim 1, wherein the reference signal received power comprises L1 RSRP, and if the

measurement port is one of all the ports configured for sidelink transmission, the L1 RSRP is equal to a measured RSRP measurement value of the port multiplied by a preset coefficient when any one of the following conditions is satisfied:

the port uses a code division multiplexing mode;

sidelink multi-port transmission is configured; and

sidelink multi-layer transmission is configured.

9. The method for measuring sidelink reference signal received power according to claim 5 or 8, wherein the preset coefficient is any one of the following:

a predefined value;

a preconfigured value;

a configured value;

a value related to a port quantity;

a value related to a layer quantity; and

a CDM number.

10. The method for measuring sidelink reference signal received power according to claim 1, wherein the reference signal received power comprises layer 1 reference signal received power L1 RSRP.

11. The method for measuring sidelink reference signal received power according to any one of claims5, 6, 8 and 10, wherein the reference signal received power further comprises layer 3 reference signal received power L3 RSRP; and

the L3 RSRP is obtained by performing weighting calculation on the L1 RSRP by using a filtering formula and/or a filtering coefficient, wherein the filtering formula and/or the filtering coefficient are/is predefined, preconfigured, or configured.

12. An apparatus for measuring sidelink reference signal received power, applied to a terminal and comprising:

a processing module, configured to determine a measurement port for a sidelink reference signal based on sidelink control information SCI; and

an obtaining module, configured to obtain reference signal received power based on the determined measurement port;

wherein in a case of multi-port transmission and/or multi-layer transmission, the measurement port is any one of:

all ports configured for sidelink transmission;

one or more of all ports configured for sidelink transmission; or

a port 1000 and a port 1001 for sidelink transmission;

or

wherein in a case of single-port transmission and/or single-layer transmission, the measurement port is any one of:

a port with a smallest port number;

a port with a largest port number;

a port with a preconfigured port number; or

a port 1000 for sidelink transmission.

13. The apparatus for measuring sidelink reference signal received power according to claim 12, wherein the measurement port is any one of the following:

a measurement port determined based on sidelink configuration information; and

a predefined measurement port.

14. The apparatus for measuring sidelink reference signal received power according to claim 13, wherein the sidelink configuration information comprises at least one of the following:

physical sidelink shared channel PSSCH configuration information;

reference signal configuration information; and

physical sidelink control channel PSCCH configuration information.

15. A communications device, wherein the communications device comprises a processor, a memory, and a computer program stored in the memory and capable of running on the processor, wherein when the processor executes the computer program, the steps of the method for measuring sidelink reference signal received power according to any one of claims 1 to 11 are implemented.

16. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program is executed by a

processor, the steps of the method for measuring sidelink reference signal received power according to any one of claims 1 to 11 are implemented.