WHAT IS CLAIMED IS:

1. A method for calculating a path loss for power control, applied to a sender device of unicast sidelink communication, comprising:

receiving a current target reference signal received power (RSRP) value returned by the receiver device; wherein, the target RSRP value is an RSRP value obtained by the receiver device through high layer filtering;

determining a target transmit power value according to at least one transmit power value used in unicast sidelink communication with a receiver device;

determining a target path loss value according to the target transmit power value and the current target RSRP value;

wherein, determining the target transmit power value according to at least one transmit power value used in unicast sidelink communication with the receiver device, comprises:

obtaining a weighted average value corresponding to first N transmit power values by filtering the at least one transmit power value based on a preset filtering parameter value according to a chronological order;

determining the weighted average value corresponding to all transmit power values before a time point when the current target RSRP value returned by the receiver device is received, as the target transmit power value.

2. The method of claim 1, wherein the at least one transmit power value comprises at least one transmit power value within a specified time period.

3. The method of claim 2, wherein the specified time period comprises:

a time period from a time point when a last target RSRP value returned by the receiver device is received to a time point when the current target RSRP value returned by the receiver device is received.

4. The method of claim 1, wherein obtaining the weighted average value corresponding to first N transmit power values by filtering the at least one transmit power value based on the preset filtering parameter value according to a chronological order comprises:

calculating a first difference between 1 and the filtering parameter value;

calculating a first product of the first difference and a weighted average corresponding to first (N-1) transmit power values;

calculating a second product of the filtering parameter value and the Nth transmit power value;

determining the weighted average value corresponding to the first N transmit power values as a sum of the first product and the second product.

5. The method of claim 1, wherein determining the target path loss value according to the target transmit power value and the current target RSRP value comprises:

obtaining the target path loss value by calculating a difference between the target transmit power value and the current target RSRP value.

6. An apparatus for calculating a path loss for power control, comprising:

a processor;

a memory configured to store instructions executable by the processor,

wherein the processor is configured to:

receive a current target reference signal received power (RSRP) value returned by the receiver device; wherein, the target RSRP value is an RSRP value obtained by the receiver device through high layer filtering;

determine a target transmit power value according to at least one transmit power value used in unicast sidelink communication with a receiver device;

determine a target path loss value according to the target transmit power value and the current target RSRP value;

wherein, determining the target transmit power value according to at least one transmit power value used in unicast sidelink communication with the receiver device, comprises:

obtaining a weighted average value corresponding to first N transmit power values by filtering the at least one transmit power value based on a preset filtering parameter value according to a chronological order;

determining the weighted average value corresponding to all transmit power values before a time point when the current target RSRP value returned by the receiver device is received, as the target transmit power value.