CLAIMS

1. A method for determining a length of a low-density parity-check code word in an ultra-wideband system, comprising:

obtaining, by a communication apparatus, a length of a to-be-encoded information bit; and

determining, by the communication apparatus, a length of a low-density parity-check LDPC code word based on the length of the to-be-encoded information bit, wherein a parity-check matrix corresponding to the LDPC code word is used to encode the to-be-encoded information bit to generate a parity bit, wherein

the length of the to-be-encoded information bit and the length of the LDPC code word meet one or more of the following conditions:

if the length of the to-be-encoded information bit is greater than 0 and less than or equal to 40 bytes, the length of the LDPC code word is 648 bits; if the length of the to-be-encoded information bit is greater than 40 bytes and less than or equal to 81 bytes, the length of the LDPC code word is 1296 bits; if the length of the to-be-encoded information bit is greater than 81 bytes and less than or equal to 121 bytes, the length of the LDPC code word is 1944 bits; or if the length of the to-be-encoded information bit is greater than 121 bytes and less than or equal to 162 bytes, the length of the LDPC code word is 1296 bits.

2. The method according to claim 1, wherein the length of the to-be-encoded information bit and the length of the LDPC code word further meet the following condition: if the length of the to-be-encoded information bit is greater than 162 bytes, the length of the LDPC code word is 1944 bits.

3. The method according to claim 2, wherein the length of the to-be-encoded information bit and the length of the LDPC code word further meet one or more of the following conditions:

if the length of the to-be-encoded information bit is greater than 162 bytes and less than or equal to 202 bytes, the length of the LDPC code word is 648 bits; if the length of the to-be-encoded information bit is greater than 202 bytes and less than or equal to 243 bytes, the length of the LDPC code word is 1944 bits; if the length of the to-be-encoded information bit is greater than 243 bytes and less than or equal to 324 bytes, the length of the LDPC code word is 1296 bits; or if the length of the to-be-encoded information bit is greater than 324 bytes, the length of the LDPC code word is 1944 bits.

4. A method for determining a length of a low-density parity-check code word in an ultra-wideband system, comprising:

obtaining, by a communication apparatus, a length of a to-be-encoded information bit; and

determining, by the communication apparatus, a length of a low-density parity-check LDPC

code word based on the length of the to-be-encoded information bit, wherein a parity-check matrix corresponding to the LDPC code word is used to encode the to-be-encoded information bit to generate a parity bit, wherein

if the length of the to-be-encoded information bit is greater than 162 bytes, the length of the LDPC code word is 1944 bits.

5. A method for determining a length of a low-density parity-check code word in an ultra-wideband system, comprising:

obtaining, by a communication apparatus, a length of a to-be-encoded information bit; and

determining, by the communication apparatus, a length of a low-density parity-check LDPC code word based on the length of the to-be-encoded information bit, wherein a parity-check matrix corresponding to the LDPC code word is used to encode the to-be-encoded information bit to generate a parity bit, wherein

if the length of the to-be-encoded information bit is greater than or equal to 122 bytes, the length of the LDPC code word is 1296 bits.

6. A method for determining a length of a low-density parity-check code word in an ultra-wideband system, comprising:

obtaining, by a communication apparatus, a length of a to-be-encoded information bit; and

determining, by the communication apparatus, a length of a low-density parity-check LDPC code word based on the length of the to-be-encoded information bit, wherein a parity-check matrix corresponding to the LDPC code word is used to encode the to-be-encoded information bit to generate a parity bit, wherein

the length of the to-be-encoded information bit and the length of the LDPC code word meet the following conditions: when the length of the to-be-encoded information bit is greater than 121 bytes and less than or equal to 162 bytes, if a data rate is less than or equal to a preset threshold, the length of the LDPC code word is 1296 bits; or when the length of the to-be-encoded information bit is greater than 121 bytes and less than or equal to 162 bytes, if the data rate is greater than the preset threshold, the length of the LDPC code word is 1944 bits.

7. The method according to claim 6, wherein the length of the to-be-encoded information bit and the length of the LDPC code word further meet the following condition: if the length of the to-be-encoded information bit is greater than 162 bytes, the length of the LDPC code word is 1944 bits.

8. The method according to claim 6 or 7, wherein the preset threshold is 1.95 Mbps or 7.8 Mbps.

9. The method according to claim 6 or 7, wherein the length of the to-be-encoded information bit and the length of the LDPC code word further meet one or more of the following conditions: if

the length of the to-be-encoded information bit is greater than 0 and less than or equal to 21 bytes, the length of the LDPC code word is 648 bits; if the length of the to-be-encoded information bit is greater than 21 bytes and less than or equal to 44 bytes, the length of the LDPC code word is 1296 bits; or if the length of the to-be-encoded information bit is greater than 44 bytes and less than or equal to 121 bytes, the length of the LDPC code word is 1944 bits.

10. A communication apparatus, comprising units or modules configured to perform the method according to any one of claims 1 to 9.

11. A communication apparatus, comprising a processor and a memory, wherein

the memory is configured to store instructions; and

the processor is configured to execute the instructions, to enable the method according to any one of claims 1 to 9 to be performed.

12. A communication apparatus, comprising a logic circuit and an interface, wherein the logic circuit is coupled to the interface; and

the interface is configured to input and/or output code instructions, and the logic circuit is configured to execute the code instructions, to enable the method according to any one of claims 1 to 9 to be performed.

13. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store a computer program, and when the computer program is executed, the method according to any one of claims 1 to 9 is performed.