10.4 Agreement Description
The 9100 series inverter communication protocol is an asynchronous serial master-slave ModBus communication protocol with only one device in the network.
(Host) can establish a protocol (called "query/command"). Other devices (slave) can only respond to the host's "query/command" by providing data, or according to the host's "query/command". The host refers here to a personal computer (PC), industrial control device or programmable logic controller (PLC). The slave refers to the 9100 series inverter or other control devices with the same communication protocol. The host can communicate with a single slave and broadcast information to all slaves. For a single access to the host "query / command", the slave must return a message
(called response), the slave does not need to feed back the response information to the host for the broadcast information sent by the host.

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| FeatureDescription | addressdefinition | Data meaning description | **R/W**characteristic |  |
| Communication control command | 1000H | 0001H：Forward | W/R |  |
| 0002H：Reverse |  |
| 0003H：Forward Jog |  |
| 0004H：Reverse jog |  |
| 0005H：Downtime |  |
| 0006H：Free stop (emergencyDowntime) |  |
| 0007H：Fault reset |  |
| 0008H：Jog stop |  |
| status | 1001H | 0001H：Forward running | R |  |
| 0002H：Reverse running |  |
| 0003H：Inverter standby |  |
| 0004H：error |  |
| communication | 2000H | Communication setting range | W/R |  |
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| Function Description |  | addressdefinition | Data meaning description |  | **R/W**characteristic |
| Set value address |  |  | (-10000~10000) Note that the communication setting value is the percentage of the relative value.( -100.00%~100.00%Can do communication write operations. When set as a frequency source, the relative is the percentage of the maximum frequency (P0.04); when used as the torque timing, the relative upper limit is the torquePercentage of (P3.14). When given as PID or feedback, the relative is the hundred of the PIDfraction. |  |  |
| Virtual terminal input functionset up |  | 2001H | Reserved |  | W/R |
| Run/stop parameter address description |  | 3000H | Running speed |  | R |
|  | 3001H | Setting speed |  | R |
|  | 3002H | bus voltage |  | R |
|  | 3003H | output voltage |  | R |
|  | 3004H | Output current |  | R |
|  | 3005H | Operating speed |  | R |
|  | 3006H | Output Power |  | R |
|  | 3007H | Output torque |  | R |
|  | 3008H | PID given value |  | R |
|  | 3009H | PID Feedback value |  | R |
|  | 300AH | Terminal input flag status |  | R |
|  | 300BH | Terminal output flag status |  | R |
|  | 300CH | Analog AI1 value |  | R |
|  | 300DH | Analog AI2 value |  | R |
|  | 300EH | Analog AI3 value |  | R |

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| Function Description | Address definition | Data meaning description | **R/W**characteristic |
|  | 300FH | Analog AI4 value | R |
| 3010H | High speed pulse frequency（HDI1） | R |
| 3011H | High speed pulse frequency（HDI2） | R |
| 3012H | Multi-speed and PLC current number of segments | R |
| 3013H | Length value | R |
| 3014H | External counter input value | R |
| 3015H | Torque direction (0:forward,1Reverse) | R |
| 3016H | Device code | R |
| Parameter lock password checkaddress | 4000H | \*\*\*\* | W |
| Parameter lock password commandaddress | 4001H | 55AAH | W |
| Inverter fault address | 5000H | The fault information code is consistent with the serial number of the fault type in the function code menu, except that the hexadecimal data is returned to the host computer instead of the fault character. | R。 |