RS485 functions and address codes for UNIQUE-G1100

It is adopted the function code group number and label as the regulation:

Upper byte: F0~FF(group P), A0~AF(group A), 70~7F(group U)

Low byte: 00~FF

For example: If range function code P3-12, the access address is 0×F30C;

Attention:

Group PP: It can not read the parameters, also can not change the parameters;

Group U:It is only read parameters, can not change parameters.

When the inverter is in running state, some parameters can not be changed; some parameters will not be changed whatever the inverter in which state; when change function code parameters, it should notice the parameters' range, units and related description.

Function code group number	Communication access address	Communication amend the function code add in RAM
Group P0~PE	0×F000~0×FEFF	0×0000~0×0EFF
Group A0~AC	0×A000~0×ACFF	0×4000~0×4CFF
Group U0	0×7000~0×70FF	

Note：Because EEPROM is saved continually, it will reduce the service life of EEPROM. So in communication mode, some function code no need to be saved, it only change RAM value.

If it is group P parameters, in order to implement the function, only need to change the high order F as 0.

If it is group A parameters, in order to implement the function, only need to change the high order A as 4.

The address of corresponding function code is as below:

Upper byte: 00~0F(group P), 40~4F(group A)

Low byte: 00~FF

For example:

The function code P3-12 don't be saved to EEPROM, the address is 030C;

The function code A0-05 don't be saved to EEPROM, the address is 4005;

This address only can be write RAM, can not be read action, when it is reading, it is invalid Address.

About all the parameters, it also can adopt command code 07H to achieve the function.

The parameters of stopping / running:

Parameter's ADD	Parameters description	Parameter's ADD	Parameters description
1000H	*Communication setting value(decimal) -10000~10000	1010H	PID setting
1001H	Running frequency	1011H	PID feedback
1002H	Busbar voltage	1012H	PLC procedure
Parameter's ADD	Parameters description	Parameter's ADD	Parameters description
1003H	Output voltage	1013H	PULSE input pulse frequency, the unit is

			0.01kHz
1004H	Output current	1014H	Feedback speed, the unit is 0.1Hz
1005H	Output power	1015H	Residual running time
1006H	Output torque	1016H	AI1 pre-correction voltage
1007H	Running speed	1017H	AI2 pre-correction voltage
1008H	DI input flag	1018H	AI3 pre-correction voltage
1009H	DO output flag	1019H	Line speed
100AH	AI1 voltage	101AH	Current power on time
100BH	AI2 voltage	101BH	Current running time
100CH	AI3 voltage	101CH	PULSE input pulse frequency, the unit is 1Hz
100DH	Numerical input	101DH	Communication setting value
100EH	Length value input	101EH	Actual feedback speed
100FH	Loading speed	101FH	Main frequency X display
—	—	1020H	Auxiliary frequency Y display

Note:

Communication setting value is the percentage of relative value, 1000 is corresponding to 100.00%, -10000 is corresponding to -100.00%.

About frequency dimensional data, this percent is for relative maximum frequency(P0-10); about data on torque dimensions, the percent is P2-10, A2-48, A3-48, A4-48 (torque upper limit numerical setting, correspond to first and second motor).

Control command input to inverter: (write only)

Command word address	Command function
2000H	0001: Forward RUN
	0002: Reverse RUN
	0003: Forward JOG
	0004: Reverse JOG
	0005: Coast to stop
	0006: Deceleration stop
	0007: Fault Reset

Read inverter state: (read only)

Status word address	Command function
3000H	0001: Forward RUN
	0002: Reverse RUN
	0003: Stop

Parameter locking password check:(If the return is 8888H, then password check is passed)

Password address	Enter the contents of the password
1F00H	*****

Digital output terminal control:(write only)

Command address	Command content
2001H	BIT0: DO1 outgoing control BIT1: DO2 outgoing control BIT2: RELAY1 outgoing control BIT3: RELAY2 outgoing control BIT4: FMR outgoing control

Analog output AO1 control: (write only)

Command address	Command content
2002H	0~7FFF means 0%~100%

Analog output AO2 control: (write only)

Command address	Command content
2003H	0~7FFF means 0%~100%

Pulse output control: (write only)

Command address	Command content
2004H	0~7FFF means 0%~100%

The faults of inverter:

The fault address of inverter	The fault message	
8000H	0000: No fault	0015: Parameter read-write fault
	0001: Reserved	0016: AC drive hardware fault
	0002: Overcurrent during acceleration	0017: Motor short circuit to ground
	0003: Overcurrent during deceleration	0018: Reserved
	0004: Overcurrent at constant speed	0019: Reserved
	0005: Overvoltage during acceleration	001A: Running time reached
	0006: Overvoltage during deceleration	001B: User-defined fault 1
	0007: Overvoltage at constant speed	001C: User-defined fault 2
	0008: Buffer resistance overload fault	001D: Power-on time reached
	0009: Undervoltage	001E: Load becoming
	000A: AC drive overload	001F: PID feedback lost during running
	000B: Motor overload	
	000C: Power input phase loss	0028: Pulse-by-pulse current limit fault
	000D: Power output phase loss	
	000E: Module overheat	0029: Motor switchover fault during running
	000F: External equipment fault	

	0010: Communication fault	002A: Too large speed deviation
	0011: Contactor fault	002B: Motor over-speed
	0012: Current detection fault	002D: Motor overheat
	0013: Motor auto-tuning fault	005A: Encoder line number setting error
	0014: Encoder/PG card fault	005B: No encoder
		005C: Initial position fault
		005E: Speed feedback error