

# **DR MODBUS USER INSTRUCTIONS**

1, The instrument RS485 communication BPS is fixed at 9600 bits/s, start bit=1, data bit=8, stop bit=1, starting and ending time >5ms.

2, The format of the data reading and writing is same as standard Modbus protocol. Definition as follows:

Request: (eg. Send order to read AI current value: 01 03 00 B9 00 02 15 EE)

01	03	0185(00B9H)	0002	(15EE)
ADD	COM	PV1	Counts	CRC

Response: (eg. Return data: 01 03 04 6D 96 49 F3 71 66)

01	03	04	6D96 49F3	7166
ADD	COM	Counts	PV1	CRC

Return Power: 2 WORD

PV1 = 6D96 49F3=6D96.49F3H= INT 6D96H+ POINT 49F3H=28054+18931/65536=28054.2888  
(49F3H=18931 6D96H=28054)

When Max bit is "1", means negative, viz. sign bit.

For example, KW=ED9649F3= ED96.49F3H = -(6D96H+0.49F3H) = --28054.2888

Note: The first data is INT, the second data is POINT. Transfer the second data in HEX format, and divide 65536 to Decimal format..

From the above example, 49F3H=18931 / 65536=.2888, take the first 4 digits after decimal point.(0.2888)

3, When setting parameters, can read multi- parameters; when writing, can write 1 parameter only every time

4, Commands:

03H: read holding registers parameters

06H: write single holding register parameter value

10H: write multi holding registers parameters value

DRZ9 meter reading and writing parameter

Parameters address	Parameter type	COUNTS (Words)	Function	Remark
B6H(0182)	AV	2	Voltage measuring value	Read only
BDH(0189)	RI	2	Resistance measuring value	Read only
B9H(0185)	AI	2	Current measuring value	Read only
0001	ADP	2	Decimal point for Current	R/W
0015	Add	1	Communication address	R/W
0012	PVF	2	Offset value for Resistance	R/W
0016	AL1	2	AL1 value, or Max current for Megger ohmmeter	
0033	TRL	2	Transmitting Low output resistance for Current 4Ma	R/W
0036	TRH	2	transmit High output resistance for Current 20Ma	R/W
0024	AL2	2	AL2 value	R/W
0028	HY2	2	AL2 hysteres	Read and write
0031	AM2	1	AL2 mode	Read and write