

PTL & BCT PRESSURE TRANSMITTER

MODBUS PROTOCOL ADDRESS TABLE

COIL ADDRESS TABLE

Coil Address (hex)	Parameter Name	Parameter Description	Count of Bit	Value	Read/Write
0x00	RESET_VALLEY	Reset the minimum value recorded since the device was turned on	1 bit	1=Reset	WO
0x01	RESET_PEAK	Reset the maximum value recorded since the device was turned on			
0x02	RESET_PEAK_VALLEY	Reset the maximum and minimum values recorded since the device was turned on			

If 1 is written to the corresponding Coil Address, the operation described in the Parameter Description will be performed.

HOLDING REGISTER ADDRESS TABLE

Holding Register Address (hex)	Parameter Name	Parameter Description	Count of Bit	Default Value	Read/Write
Modbus Settings	0x00	UART_ADDRESS	Address information for network connection (between 1 and 247)	1	Read/Write
	0x01	UART_BAUD_HIGH	Baud rate [MSB]	9600	Read/Write
	0x02	UART_BAUD_LOW	Baud rate[LSB]		Read/Write
	0x03	UART_PARITY	Parity (0=None, 1=Odd, 2=Even)	0	Read/Write
	0x04	UART_PERIOD	Period (1/ms)	100	Read/Write
Units	0x06	PRESSURE UNIT	Pressure unit; 0:mBar 1:Bar 2:pa 3:at 4:mmh20 5:mHG 6:Atm 7:PSI	0 1	Read/Write
	0x07	TEMPERATURE UNIT	temperature unit; 0:°C 1:°F 2:°K	0	Read/Write
Pressure	0x2F	PRESSURE_DIGITS	Position of the decimal point in the display (0=A, 1=A.A, 2=A.AA, 3=A.AAA 4=A.AAAA)	-	Read/Write
	0x30	SCALING_FACT_HIGH	Pressure multiplier value [MSB]	1	Read/Write
	0x31	SCALING_FACT_LOW	Pressure multiplier value [LSB]		Read/Write
	0x32	OFFSET_HIGH	Pressure Offset value [MSB]	0	Read/Write
	0x33	OFFSET_LOW	Pressure Offset value [LSB]		Read/Write
Temperature	0x3F	TEMPERATURE_DIGITS	Position of the decimal point in the display (0=A, 1=A.A, 2=A.AA, 3=A.AAA 4=A.AAAA)	2	Read/Write
	0x40	SCALING_FACT_HIGH	Temperature multiplier value [MSB]	1	Read/Write
	0x41	SCALING_FACT_LOW	Temperature multiplier value [LSB]		Read/Write
	0x42	OFFSET_HIGH	Temperature Offset value[MSB]	0	Read/Write
	0x43	OFFSET_LOW	Temperature Offset vale[LSB]		Read/Write

*MSB (Most Significant Bit) or H word (HIGH): Refers to the higher 16 bits of a 32-bit number.

*LSB (Least Significant Bit) or L word (LOW): Refers to the lower 16 bits of a 32-bit number.

*When entering values using H word and L word, the "Write Multiple Registers (0x10)" function code must be used, and both values must always be provided. The decimal points value for these entries is always set to 3.

*For example, to set the value of SET1A to 66.5, SET1A_HIGH should be 1000 (1.000d), and SET1A_LOW should be 964 (0.964d).

INPUT REGISTER ADDRESS TABLE

Input Register Address (hex)	Parameter Name	Parameter Description	Count of Bit	Default Value	Read/Write
0x00	PRESSURE_VALUE	Instantaneous pressure value	16Bit	-	RO
0x01	PRESSURE_DIGITS	Position of the decimal point in the display (0=A, 1=A.A, 2=A.AA, 3=A.AAA 4=A.AAAA)		0 1 2 3	
0x02	PRESSURE_UNIT	Unit of the measured pressure; 0:mBar 1:Bar 2:pa 3:at 4:mmh20 5:mHG 6:Atm 7:PSI		0 1	
0x03	VALLEY_VALUE_PRESSURE	Minimum value recorded since the device was powered on		-	
0x04	PEAK_VALUE_PRESSURE	Maximum value recorded since the device was powered on		-	
0x05	MIN_RANGE_PRESSURE	Minimum readable value. Zero Pressure Value		-	
0x06	MAX_RANGE_PRESSURE	Maximum readable value. Span Pressure Value		-	
0x07	TEMPERATURE_VALUE	Instantaneous temperature value		-	
0x08	TEMPERATURE_DIGITS	Position of the decimal point in the display (0=A, 1=A.A, 2=A.AA, 3=A.AAA 4=A.AAAA)		2	
0x09	TEMPERATURE_UNIT	Unit of the measured temperature; 0:°C 1:°F 2:°K		0	
0x0A	VALLEY_VALUE_TEMPERATURE	Minimum value recorded since the device was powered on		-	
0x0B	PEAK_VALUE_TEMPERATURE	Maximum value recorded since the device was powered on		-	
0x0C	MIN_RANGE_TEMPERATURE	Minimum readable value. Zero Temperature Value		-	
0x0D	MAX_RANGE_TEMPERATURE	Maximum readable value. Span Temperature Value		-	

Function Code Definitons

Read Coil	0x01
Read Holding Register	0x03
Read Input Register	0x04
Write Single Coil	0x05
Write Single Register	0x06
Write Multiple Coils	0x0f
Write Multiple Register	0x10

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