

[0x0413] Read Measured PM Values

Returns the measured particulate matter values.

The command 0x0202 "Read Data Ready" can be used to check if new data is available since the last read operation. If no new data is available, the previous values will be returned again. If no data is available at all (e.g. measurement not running for at least one second), all values will be 0xFFFF.

Read Measured PM Values			
Command ID	0x0413		
Firmware Versions	Available in: >0.7		
Read Delay	20 ms		
Post Processing Time	0 ms		
Max. RX Data With CRC	30 Bytes		
TX Data	None		
RX Data	Byte #		Description
	0	MSB	Mass Concentration PM1.0: uint16
	1	LSB	Value is scaled with factor 10: PM1.0 [μ g/m ³] = value / 10
	2	CRC	Note: If this value is unknown, 0xFFFF is returned.
	3	MSB	Mass Concentration PM2.5: uint16
	4	LSB	Value is scaled with factor 10: PM2.5 [μ g/m ³] = value / 10
	5	CRC	Note: If this value is unknown, 0xFFFF is returned.
	6	MSB	Mass Concentration PM4.0: uint16
	7	LSB	Value is scaled with factor 10: PM4.0 [μ g/m ³] = value / 10
	8	CRC	Note: If this value is unknown, 0xFFFF is returned.
	9	MSB	Mass Concentration PM10.0: uint16
	10	LSB	Value is scaled with factor 10: PM10.0 [μ g/m ³] = value / 10
	11	CRC	Note: If this value is unknown, 0xFFFF is returned.
	12	MSB	Number Concentration PM0.5: uint16
	13	LSB	Value is scaled with factor 10: PM0.5 [#/cm ³] = value / 10
	14	CRC	Note: If this value is unknown, 0xFFFF is returned.
	15	MSB	Number Concentration PM1.0: uint16
	16	LSB	Value is scaled with factor 10: PM1.0 [#/cm ³] = value / 10
	17	CRC	Note: If this value is unknown, 0xFFFF is returned.
	18	MSB	Number Concentration PM2.5: uint16
	19	LSB	Value is scaled with factor 10: PM2.5 [#/cm ³] = value / 10
	20	CRC	Note: If this value is unknown, 0xFFFF is returned.
	21	MSB	Number Concentration PM4.0: uint16
	22	LSB	Value is scaled with factor 10: PM4.0 [#/cm ³] = value / 10
	23	CRC	Note: If this value is unknown, 0xFFFF is returned.
	24	MSB	Number Concentration PM10.0: uint16
	25	LSB	Value is scaled with factor 10: PM10.0 [#/cm ³] = value / 10
	26	CRC	Note: If this value is unknown, 0xFFFF is returned.
	27	MSB	Typical Particle Size: uint16
	28	LSB	Value is scaled with factor 1000: Size [μ m] = value / 1000
	29	CRC	Note: If this value is unknown, 0xFFFF is returned.