

# USB Communication Protocol for CO2mini

## Format to USB Protocol

Item	MSB	LSB	Sum	CR
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<b>Item</b>	“P”(50h): CntR (Relative Concentration of CO2) “B”(42h): Tamb (Ambient Temperature)
<b>MSB</b>	8 bit Data Msb
<b>LSB</b>	8 bit Data Lsb
<b>Sum</b>	Item+MSB+LSB=SUM
<b>CR</b>	0Dh, End of the message

## Example of USB Protocol

### 1. Relative Concentration of CO2 (CntR)

50	10	00	60	0D
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<b>Item</b>	50h → “P” the item code of CntR
<b>Data</b>	MSB      10h LSB      00h Relative Concentration of CO2 = 1000ppm
<b>Sum</b>	Checksum 50h+10h+00h=60H (Only Low Byte)
<b>CR</b>	0Dh → ‘Carriage Return’ means End of Message

### 2. Ambient Temperature (Tamb)

42	27	50	B9	0D
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<b>Item</b>	42h → “B” the item code of ambient temperature
<b>Data</b>	MSB      27h LSB      50h Real Temperature Value = 27.50 °C
<b>Sum</b>	Checksum 42h+27h+50h=B9h (Only Low Byte)
<b>CR</b>	0Dh → ‘Carriage Return’ means End of Message