MTP-NT range of digital values in TCP data stream

This is a table of the whole range of digital values: nt_digital_range.xlsb
The column "decimal" shows the unsigned short value, coming in the TCP data stream.
This values must be converted into signed short (by subtracting 32768).
The column "bipolar" shows the result that represents the measured value.

Calculation of the bipolar value:
[incoming digital value] - 32768 = [bipolar value]
Examples:

```
65535 - 32768 =  32767
32768 - 32768 =      0
    0 - 32768 = -32768
```

Analog measurement (strain gauge, voltage etc.):
The range of bipolar values is -32768 to 32767.
The fullscale signal range is -32704 to 32704.
Example 1 (STG module):
* input range setting = ±5 mV/V
* applied bridge unbalance = +5 mV/V
* digital value (unsigned short) = 65472
* bipolar value = 32704
Example 2 (Volt module):
* input range setting = ±10 Volt
* applied input voltage = +10 Volt
* digital value (unsigned short) = 65472
* bipolar value = 32704

Temperature measurement:
The digital output resolution is 0.05K/step* (20 steps/Kelvin)
This means that the bipolar value must be divided by 20 to get the temperature.
Example:
* sensor temperature = +100°C
* digital value (unsigned short) = 34768
* bipolar value = 2000
sensor fault message (sensor break): Temperature value = -999.0°C
unreasonable value message (overflow): Temperature value = -998.0°C

* This means the mathematically generated output resolution after linearization; the true ADC resolution depends on sensor type and temperature range and may be significantly lower.

Analog Decoder output:
The bipolar fullscale value (±32704) generates an analog output Voltage of ±10.00 Volt.

Analog Decoder output (Temperature Values):
The 10.00 Volts analog fullscale value corresponds to the fullscale temperature of 1635.20 degrees Celsius. Therefore, the factor for obtaining the temperature value from the analog decoder output is **163.52** (example: 1.00 volts analog output voltage multiplied by 163.52 gives the reading 163.52 degrees Celsius).

Data Stream		Analog Out	Temperature (depending on module setting)			
decimal	**bipolar**	(±10V)	-273/+1635	-273/+1000	-273/+500	-250/+250
		Volt	°C	°C	°C	°C
65535	32767	10,019264	1638,35	1001,93	500,96	250,48
65472	32704	10,000000	1635,20	1000,00	500,00	250,00
45850	13082	4,000122	654,10	400,01	200,01	100,00
39309	6541	2,000061	327,05	200,01	100,00	50,00
36039	3271	1,000183	163,55	100,02	50,01	25,00
32768	0	0,000000	0,00	0,00	0,00	0,00
27305	-5463	-1,670438	-273,15	-167,04	-83,52	-41,76
23835	-8933	-2,731470		-273,15	-136,57	-68,29
14902	-17866	-5,462940			-273,15	-136,57
64	-32704	-10,000000				-250,00
0	-32768	-10,019569				-250,49