



## DEF

## **Definitions:**

Level and power measures	
dBμV	Voltage level in relation to 1 µV (Interpretation: "by how many dB is a voltage higher than 1 µV")
dBmV	Voltage level in relation to 1 mV (Interpretation: "by how many dB is a voltage higher than 1 mV")
dBm	Power level in relation to 1 mW (Interpretation: "by how many dB is a power higher than 1 mW")

Converting formulas	
$dB\mu V = dBm V + 60 dB$	
dBmV = dBµV - 60 dB	
dBµV = dBm + 108.75 dB (with Z = 75 $\Omega$ )	
dBµV = dBm + 107.00 dB (with Z = 50 $\Omega$ )	

Frequency bands	
HF: High Frequency	3 MHz 30 MHz
VHF: Very High Frequency	30 MHz 300 MHz
UHF Ultra High Frequency	300 MHz 3 GHz

Level relations in a broadband cable network	
System level (traditionally)	PAL image carrier level
DVB-C / DOCSIS <= 3.0 @ 64 QAM	PAL - 10 dB
DVB-C / DOCSIS <= 3.0 @ 256 QAM	PAL - 4 dB



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