To:

Dust Sensor GP2Y1010AU0F
Dust Density Conversion

System Device Unit
Electronic Components and Devices Company

SHARP Corporation

SPEC Comparison GP2Y1010AU0F

	GP2Y1010AU0F
Output Type	Analog Voltage (V)
Output at no dust “Voc”	0 to 1.5 (V)
Sensitivity “K”	0.5V ±30%/(100μg/m^3)
Sampling data	Single-shot output Every 10 msec (Tolerance of “Voc” is around ± 0.15 V)
Other function	N/A

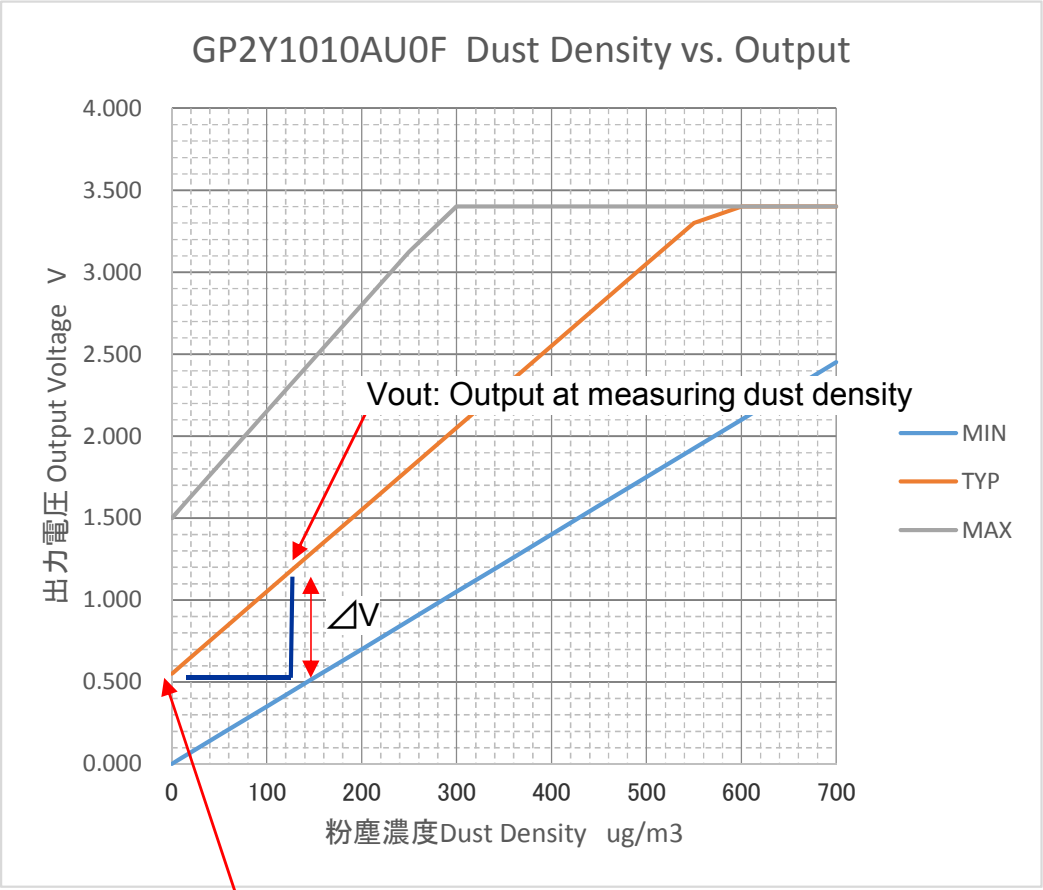
Conversion Formula from Output to Dust Density

Dust Density（μg/m³）=（⊿V/ K）x 100

⊿V = Vout - Voc
Voc: Output at no dust
Vout: Output at measuring dust
K:Sensitivity

(Noted)
Conversion Formula is applied under conditions of SPEC sheet
such as measuring the density of MEVIUS (made by Japan Tabacco Inc.)
Please refer SPEC sheet.

Dust Density vs. Output



<Noted> Data of MIN, TYP and MAX in graph are converted by combination SPEC of Voc (MIN, TYP and MAX) and SPEC of K (MIN, TYP and MAX.)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