

13 Copper Density Meter

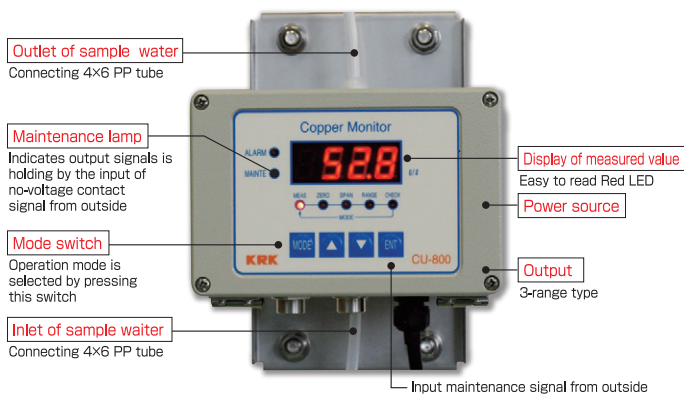
(0~80g/l Cu measuring standard)

CU-800

This is a In-Line type Copper Density Meter which continuously measures Copper density such as copper sulfate plating solution, copper etching solution, etc.

And installation, Calibration and Maintenance is easy because detector and indicating converter are unified.

Density signal from the meter is connected to various kind of controller and is controlled to be appropriate copper density.



Mode Lamp

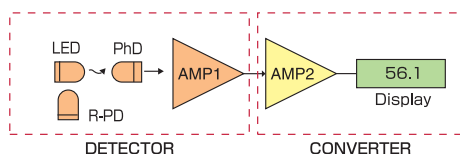


Every time this mode switch is pressed, location of mode lamp changes like MEAS→ZERO→SPAN→RANGE→CHECK→MEAS→...

- MEAS** displays under measurement
- ZERO** select this lamp at zero calibration
- SPAN** select this lamp at span calibration
- RANGE** select this lamp when you need full scale of transmittal output
- CHECK** select this lamp at detector maintenance

Measuring Theory

LED from light source, photo cell at receiver, signal related to the density from density sensor formed at optical windows, etc. are amplified at converter and digitally displayed. Also, in order to prevent deterioration of sensor LED and influence by temperature change, it has automatic temperature compensation system, and correctly measures density of plating solution.



Specifications

Meter

Product name	Copper Density Meter of Copper plating solution		
Display	LED red 4 digits		
Model (instructed)	CU-800 (for high density measurement) CU-800L (for low density measurement)		
Measuring range	CU-800(High) : 0.0~80.0g/l(Cu) CU-800L(Low) : 0.00~20.00g/l(Cu)		
Resolution	① 0.1g/l(high density), ② 0.01g/l (low density), ③ 1g/l (copper sulfate)		
Transmittal output	DC4~20mA(isolation type), load resistance 250~500Ω, Std.		
	Cu(high) FS:80g/l	Cu(low) FS:20g/l	Cu sulfate FS:300g/l
Range 1	0~80	0~20	0~300
Range 2	0~50	0~10	0~200
Range 3	0~20	0~5	0~100
	*Transmittal output is instructed as 4~20mA or RS-232C *Transmittal output cable is 5m standard with Y terminal *RC-232C output, Transmittal cable with plug and connector (max.10m) optional		
Accuracy	Within ±2% of F.S		
Ambient temperature	0~40℃		
Hold function	DC output 4~20mA by inputting no-voltage contact point signal from outside		
Power voltage	AC100/110V 50/60Hz, Cable 5m, with plug, standard *In case of 200~240V or cable extension, instruction in advance is appreciated because Y terminal treatment is applied without 3p plug		
Weight	About 2kg		

Cu Detector Specifications

Model	High density : CUD-3C Low density : CUD-10C
Method	Light Absorbance Method, In-line type measurement
Liquid Junction	PPS, Safire standard (or quartz), PP
Sample condition	Sample pressure : 0.2 MPa or less Sample temperature : 80℃ or less
Pyping	PP tube(φ6×φ4)
Installation	Pole or fix on the wall(SUS-304 fixing board is standard)
Std. component	Detector and indicating converter are unified. Pole fixing board (SUS-304), PP tube (3m), Power cable 5m, Current output signal cable 5m, Hold signal cable 5m, Handling Instruction, Written Guarantee
Optional ACCS.	RS232C output, exclusive plug, cable with connector (max, 10m), Standard solution for calibration, relay box, extension cable, Feeding pump for supplying liquid (Tell us power source and frequency)