METTLER TOLEDO

Benchtop Density Meters









PC Software

None

USB



EasyPlus Line Excellence Line Density Meters Excellence D4 Excellence D5 Excellence D6 Easy D30 Easy D40 30474900 30474901 30474902 30468670 30468671 **Catalog Number** Density 0 - 3 0 - 3 0 - 3 0 - 3 Measuring Range (g/cm³) 0 - 3 ±0.000005 Accuracy (g/cm³) ±0.0001 ± 0.00005 ±0.001 ±0.0005 Repeatability (g/cm³) ±0.00005 ±0.000005 ±0.000001 ±0.0001 ±0.00005 Resolution (g/cm³) 0.0001 0.00001 0.000001 0.001 0.0001 **Temperature** 0 - 95 Temperature Range of Sample (°C) 15 - 25 15 - 50 0 - 95 0 - 95 ±0.2 ±0.03 ±0.02 ±0.01 ±0.1 Accuracy (°C) **Temperature Control** \checkmark \checkmark \checkmark \checkmark \checkmark **Measurement Scales** Specific gravity, acid/base scales, chemicals, salt, freezing point scales, Twaddell, light and heavy Baumé Density, Specific Gravity, Integrated Concentration Alcohol: OIML, AOAC, Proof Degree, HM C&E, Gay Lussac Ethanol, Sugar tables, API Density and Specific Gravity **Tables and Functions** Sugar: Plato, Brix (Emmerich, NBS 113), HFCS 42/55, Invert Sugar, KMW, Oechsle, Babo functions, Acid tables, Urea, Petro: API degrees and gravity tables for crude oils, refined products and lubricants User-defined concentration Up to 30 user-defined concentration tables (can be entered as tables or formulas) **User Interface** Syringe w/o holder: 1.5 Syringe w/o holder: 1.5 Syringe w/o holder: N/A Approx. 1.2 Minimal Sample Volume (mL) Syringe w/ holder: 2.5 Syringe w/ holder: 2.5 Syringe w/ holder: 2.5 Approx. 1.2 Automated: 4 Automated: 4 Automated: 4 200 20 20 **Internal Results Storage** 200 200 Number of Methods 120 120 120 1 6 **Connectivity** Refractive Index Cell; pH SevenCompact; Conductivity SevenCompact; Color Konica **Multiparameter Compatibility** None None Minolta CM5/CR5' Color Lovibond PFX-8xx/PFX-9xx; Color Lovibond PFXi-195 Drying pump – DryPro; Sampling pump – SPR200; SV3 3-way valve; SV3 SPR200 Bundle; InMotion Autosampler Flex; SC1 – Single Sample Automation; SC30 – Multiple **Automation Options** None None Samples Automation; SC1H - Heated Single Sample Automation; SC3OH - Heated Multiple Samples Automation EasyDirect Density EasyDirect Density LabX and Refractometry **PC Software** LabX LabX and Refractometry PC Software

Printers	USB, Compact, Network	USB, Compact, Network	USB, Compact, Network	USB	USB
Services					
EQPac + SCC Calibration*	✓	✓	✓	×	×
IPac (Calibration Optional)	×	×	×	×	×
StarterPac (Calibration Optional)	×	×	×	×	×
Extended Care (Calibration Optional)	×	×	×	×	×
On-Site Service	×	×	×	×	×

USB, Network

USB, Network

*If a customer requires an EQPac, one of the three accessories is also required: DryPro Pump, SC1 (or SC1H), or SC30 (or SC30H)

USB, Network

Data Export

METTLER TOLEDO

Benchtop Refractometers

	METTLER TOLEDO	METLER TOLEDO				
	Excellence Line			EasyPlus Line		
Refractometers	Excellence R4	Excellence R5	Easy Brix	Easy R40	Easy Bev	
Catalog Number	30474903	30474904	30468673	30468672	30468674	
Refractive Index						
Measuring Range (nD)	1.32 - 1.70	1.32 - 1.58	1.32 - 1.58	1.30 - 1.72	1.32 - 1.58	
Accuracy (nD)	±0.0001	±0.00002 around adjustment point ±0.00004 entire range	±0.0001	±0.0001	±0.0001	
Repeatability (nD)	±0.00005	±0.00001	±0.00005	±0.00005	±0.00005	
Resolution (nD)	0.0001	0.00001	0.0001	0.0001	0.0001	
Brix					·	
Measuring Range (% w/w)	0 - 100	0 - 100	0 - 100	0 - 100	0 - 100	
Accuracy (% w/w)	±0.05	±0.014	±0.05	±0.05	±0.05	
Repeatability (% w/w)	±0.05	±0.01	±0.05	±0.05	±0.05	
Temperature				•		
Temperature Range of Sample (°C)	5 - 100	5 - 75	15 - 25	10 - 65	15 - 25	
Accuracy (°C)	±0.1	±0.03 (from 15°C to 50°C) ±0.05 (from 5°C to 75°C)	±0.1	±0.1	±0.1	
Temperature Control	×	×	✓	✓	✓	
Measurement Scales						
Integrated Concentration Tables and Functions	nD, Zeiss (14.45), Zeiss (15.00), acid/base scales, salt, chemicals, freezing point scales Sugar: Brix, HFCS 42/55, Invert Sugar, Oechsle Up to 30 user-defined concentration tables (can be entered as tables or formulas)		Refractive Index, Brix, Brix compensated 20°C, Inverted sugar, HFCS 42/55, Oechsle	Refractive index, Brix, Inverted sugar, HFCS 42/55, Oechsle, Chemical and Freezing point tables, User-defined concentration	Refractive Index, Brix, Brix compensated 20°C, Inverted sugar, HFCS 42/55, Oechsle	
User Interface			·		·	
Minimal Sample Volume (mL)	Approx. 1	Approx. 1	Approx. 0.2	Approx. 0.2	Approx. 6	

Internal Results Storage	200	200	20	20	20		
Number of Methods	120	120	1	6	6		
Connectivity							
Automation Antions		V3 3-way valve; SV3 SPR200		None	None		

Automation Options	Bundle; InMotion Autosampler Flex; SCT – Single Sample Automation; SC30 – Multiple Samples Automation		None	None	None
PC Software	LabX	LabX	EasyDirect Density and Refractometry PC Software	EasyDirect Density and Refractometry PC Software	EasyDirect Density and Refractometry PC Software
Data Export	USB, Network	USB, Network	USB	USB	USB
Printers	USB, Compact, Network	USB, Compact, Network	USB	USB	USB
Services					
EQPac + SCC Calibration*	×	×	✓	×	×
IPac (Calibration Optional)	✓	×	✓	×	×
StarterPac (Calibration Optional)	×	×	×	×	✓
Extended Care (Calibration Optional)	×	×	✓	×	✓
On-Site Service	×	×	✓	×	✓

*If a customer requires an EQPac, one of the three accessories is also required: DryPro Pump, SC1 (or SC1H), or SC30 (or SC30H)