

PERFORMANCE CHARACTERISTICS

Type	Sensitivity (mV/A)	Peak current (kA)	Peak di/dt (kA/μs)	Noise max ^{*1} (mV _{pk-pk})	Droop typ. (%/ms)	LF (3dB) bandwidth typ. (Hz) f_L	Phase lead at 50Hz typ. (deg)	HF (3dB) bandwidth typ. (MHz) f_H ^{*2}	
								Coil Length 300mm	Coil Length 700mm

High Sensitivity Ranges of CWT ... measuring currents from 300mA

CWT015	200.0	0.03	0.2	6.5	130	150	2.0 @ 6kHz	6	4
CWT03	100.0	0.06	0.4	4.5	90	105	2.0 @ 4kHz	10	6.5
CWT06	50.0	0.12	0.8	3.0	70	80	2.0 @ 3kHz	16	10
CWT1	20.0	0.3	2.0	2.5	40	50	1.9 @ 2kHz	16	10
CWT1N	20.0	0.3	2.0	2.0	20	25	1.9 @ 1kHz	10	5
CWT3	10.0	0.6	4.0	8.0	3.0	3.5	1.0 @ 300Hz	16	10

Standard Ranges of CWT ... measuring currents from 15A

CWT3N	10.0	0.6	4.0	14.0	0.9	1.0	1.7	10	5
CWT6	5.0	1.2	8.0	14.0	0.9	1.0	1.7	16	10
CWT15	2.0	3.0	20.0	7.0	0.7	0.8	1.3	16	10
CWT30	1.0	6.0	40.0	5.0	0.5	0.6	0.9	16	10
CWT60	0.5	12.0	40.0	3.5	0.35	0.4	0.6	16	10
CWT150	0.2	30.0	40.0	3.0	0.2	0.2	0.3	16	10
CWT300	0.1	60.0	40.0	3.0	0.1	0.1	0.2	16	10
CWT600	0.05	120.0	40.0	3.0	0.06	0.05	0.1	16	10
CWT1500	0.02	300.0	40.0	3.0	0.035	0.03	0.06	16	10

^{*1}. Distributed around the f_L (-3dB) bandwidth.

^{*2}. For 2.5m cable length. Contact PEM for values of f_H for other coil and cable lengths

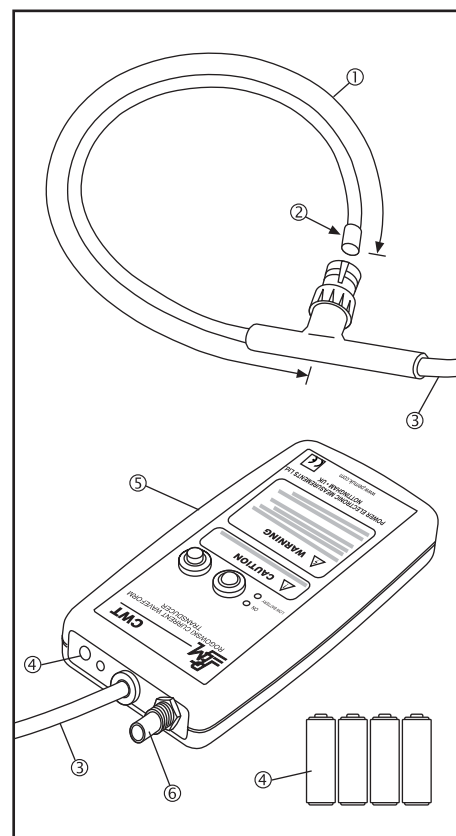
TYPICAL ACCURACY	Calibrated to UKAS ±0.2% with conductor central in the loop Variation with conductor position in the coil loop typically ±1%			TYPICAL LINEARITY	±0.05% (Full Scale)	
ABSOLUTE MAXIMUM	CWT 03, 06	PEAK 40.0	RMS 1.2 @ 70°C			
VALUES OF di/dt (kA/μs)	CWT 015, 1N, 3N	PEAK 20.0	RMS 1.0 @ 70°C			
(value must not be exceeded)	all other CWT's	PEAK 40.0	RMS 1.5 @ 70°C			(Further information available on request)

COIL AND CABLE

① COIL CIRCUMFERENCE	300, 500, 700 or 1000mm
② COIL CROSS SECTION (max)	8.5mm - (14 mm with sleeve)
PEAK COIL VOLTAGE ISOLATION	10kV
Safe peak working voltage to earth. The coils are flash tested at 15kVrms for 60 seconds. The coil is supplied with a removable silicone sleeve which provides additional mechanical protection. Information about continuous use of the coils at high voltage can be obtained from PEM.	
TEMPERATURE RANGE	-20°C to 100°C
For de-rating due to temperature cycling please consult PEM	
③ CABLE LENGTH (from box to coil)	2.5m or 4m

INTEGRATOR

④ POWER SUPPLY		
B Battery 4 x AA (1.5V standard alkali batteries) -plus- 2.1/2.5mm socket for 12 to 24V (±10%) DC input Typical life 70hrs Battery inoperative with DC supply present	R Rechargeable battery 4 x AA (rechargeable NiMH batteries) -plus- 2.1/2.5mm socket for 12 to 24V (±10%) DC input Recharge time 40hrs, Typical life 30hrs Battery is charged whenever DC supply present	
⑤ INTEGRATOR BOX DIMENSIONS	H = 183mm, W = 93mm, D = 32mm	
⑥ OUTPUT SOCKET	BNC (output impedance 50Ω - unit supplied with 0.5m BNC - BNC coaxial cable)	
MIN. OUTPUT LOADING	100kΩ (for rated accuracy)	
TEMPERATURE RANGE	0°C to 40°C	



ORDERING

Type + Power supply

Cable Length

Coil Circumference

e.g. order code

CWT30 B

4

700

If you have any queries regarding the **CWT** or require specifications outside our standard ranges please do not hesitate to contact us.