

Comparison of technical characteristics of TDRs  
**ERSTED TDR RI-307M3 vs CS 90 Telecom Cable TDR**

Model/Parameter	ERSTED TDR RI-307M3	CS 90 Telecom Cable TDR
Type	2-channel TDR	1-channel TDR
View		
TDR inputs	2 channels	1 channel
Ranges:	0 - 15 m to 0 – 128 km full screen, in 12 ranges (zoom of x2, x4, 8,...x1024 around cursor, depending on range)	0 – 3.66 km
Accuracy:	±0.01% ... 0.2%	±0.01%, ± 300
Propagation velocity: PVF: V/2:	Variable 0.330 to 0.999 50 to 150 m/μs	Fully adjustable from 0.250 to 1.000
Resolution:	0.03m in all subranges	0.075m
Gain:	0-40 dB max, selectable in 255 steps Maximum sensitivity 30 mV = full scale	0 to 90 dB
Pulse characteristics: Amplitude:	not less than 18 V @ open circuit	>4V peak
Width:	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000 or 50000 ns, user selectable	1, 5, 25 ns
Output Impedance:	from 25 Ω to 520 Ω , user selectable stepless adjustment	75 Ω
Noise Reduction Filter:	Digital Averaging 1...128	Digital Averaging 1...32
Output:		
Sockets:	2 x BNC (Female)	?
Protection:	Via external block: AC: up to 380 V rms, 0-60 Hz DC: +/-1000 V	DC: +/-400 V
Display: Type:	Color TFT 5.7" (640x480 pixels)	Color display, sunlight viewable 7" (800 X 480 pixels)
Cursor:	Two active cursors with individual control	Two cursors
Memory:	Waveform Library up to 1000 waveforms  Cables VF Library up to 500 cables	62500 traces (SD card : 8GB)  29 cables preloaded (space for up to 75 cables in total)
Modes:	Direct, 2 channels L1/L2 and L1&L2  Comparison (up to 5 sources signal simultaneously): L1 & L2 & M1 & M2 & M3  Difference(up to 5 sources simultaneously) : L1 / L2 / M1 / M2 / M3	Direct, 1 channel  ?  ?

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	<p>Internal Cable VF Library</p> <p>Intermittent faults detect mode</p> <p>Cross Talk mode</p> <p>Line impedance estimation</p> <p>Channel independent Horizontal(Xo) and Vertical(Yo) waveforms shifting mode</p> <p>«Screen shot» function</p> <p>PC data exchange via USB-flash</p>	<p>Internal Cable VF Library</p> <p>Intermittent faults detect mode</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>PC data exchange via USB/SD</p>
Interface language	English/Russian/Spain (selectable)	English
Interface with PC	Via external USB-Flash	USB
PC software for archiving waveforms	Yes, in the standard delivery	?
Power	<p>Internal Lilon (7.2±0.7) V, 6.6 Ah – 8 hours operation (Auto Power-Off: 2 ...64 mins, after last key operation)</p> <p>Ext AC-DC Adapter 12 V</p>	<p>Rechargeable li-Ion battery 30 Wh; sufficient for &gt;8 hr use with typical backlight</p> <p>Battery management system optimizes charging and lifetime</p>
Environmental: Operating Temperature: Storage Humidity	<p>-20°C ... +40°C</p> <p>-50°C ... +50°C.</p> <p>98% at 25°C</p>	<p>0°C to +50°C</p> <p>-20°C to +70°C</p> <p>No information</p>
Water ingress:	<p>IP54 – operation (open case)</p> <p>IP67 – transportation (closed case)</p>	No information
Safety:	<p>TR TS 020/2011 "Electromagnetic compatibility of technical means"</p> <p>TR TS 004/2011 "On the safety of low-voltage equipment"</p>	CE
Size, W x H x D:	246x124x70 mm	262 x 162 x 55 mm
Weight:	2.5 kg inc battery	0.9 kg
Delivery includes:	<p>AC Adapter 12 V,</p> <p>Connecting cable 75 Ohm, 5.0 m, BNC.M –«Alligator clip»,</p> <p>Connecting cable 75 Ohm, 0.1 m, BNC.M--«Alligator clip»</p> <p>Operating Manual</p> <p>Accessories bag</p>	<p>Cable scout 90 TDR (basic kit) consisting of CS90 TDR (with Li-Ion battery),</p> <p>battery charger, carrying case, test-lead alligator clip cord, user guide</p>
Standard Warranty:	1 year	No information