

COMTEST RS530



A FULL FEATURED, HIGH SPEED (10MB) RS530 TEST TOOL. MONITORS ALL SIGNAL LINES, TESTS VOLTAGE STRENGTH AND GROUND POTENTIAL DIFFERENCE.

The logical face plate makes the Comtest RS530 easy to read out and use. The "in-line" monitors test the signal for the RS422/423 standard. The Signal Strength Adapter tests the strength for realistic (0.5 – 3 volt) signal levels. It runs over 20 hours on one single 9 volt battery and has a galvanically separated 1.5 volt source.

TECHNICAL INFORMATION:

- HI/LO, high impedance, monitors on all signal lines.
- High speed monitors (10Mb) for all balanced signals lines.
- Two unassigned monitors/traps, 10Mb/20nS.
- Signal Strength test for 0.3, 0.6, 1 and 2 volts.
- Galvanically separated 1.5 volt DC source.
- Ground Potential Difference test.
- Two dual gender ribbon cables.
- One single 9 volt battery, or external 9 volt adapter.
- Self explanatory layout for easiness of use.

The Comtest RS 530 offers many features not available on other testers of its kind. Although several times faster than products of its kind, it uses less battery power. The 1.5 volt source is provided by a separate AAA size battery and galvanically separated.

The Ground Potential Difference test is an important feature needed if different grounds (wall outlets) are used. The "in line" GPD tests for voltages over 2 volts, the V11 monitor/trap allows test of Ground Potential Differences as low as 0.3 volt. The Signal Strength test allows the user to test for signal levels of 0.3, 0.6, 1 and 2 volts of GPD or the balanced interface lines.

The Comtest RS530 breaks all 25 interface lines and has access sockets on both sides of the switches, making it possible to break and crosshatch all lines by means of the switches and the jumper cables supplied with the unit. The two dual gender ribbon cables assure 100% connectivity in any type of configuration. All contacts are gold plated to ensure good electrical contact.

It is housed in a moulded, durable ABS plastic case, with the battery compartment on the backside. The logical face plate is easy to read and gives all information needed to test the RS530 interface.

The Comtest RS530 runs over 20 hours on a single 9 volt battery. It can also be powered by an optional 9 volt (stab. / min. 100mA) mains adapter.

Size of main unit: 150 x 105 x 20 mm

Weight: 295 grams.

Full technical information is provided on panels in case and on the back.

Ground Potential Differences:

G.P.D. develops when systems are wrongly grounded or use different grounds. If using different wall outlets or UPSs this test is recommended. Read chapter "Inps & Ticks" in the user manual for more information.

To test G.P.D. open all dual in line switches. LED on #7 lights if G.P.D. is over 2 volt. For a more accurate test (300mV) use the extra V. 11 monitor. connect A resp. B to the left and right socket # 7, the pulse trap stores short duration pulses

Signal strength test:

This product complies with the norms for V.10/11. The minimum voltage needed according to the standard (reference for the in-line monitors) is too low to assure a reliable communication. The signal strength test allows testing for the real voltage strength. For V.11 connect A resp. B of the signal line to A/B of the extra monitor. Signals exceeding the selected voltage will light the LEDs. For V.10 connect the signal line to the unassigned S.E. monitor. Signals exceeding the selected voltage will light the LEDs. The trap will trigger according to selected ranges.

PIN							
A	B	Abbr.	Description	BA	CCIT	Source	
2	14	TD	Transmit Data	BA	100	DTE	
3	16	RD	Receive Data	BA	104	DCE	
4	19	RTS	Request to Send	CA	108	DTE	
5	13	CTS	Clear to Send	CA	108	DCE	
6	22	DCR	DCE Ready	CC	107	DCE	
22	23	DTR	DTE Ready	CC	108/2	DTE	
5	10	RLSD	Received Line Signal Detector	CF	109	DCE	
24	11	TSET	Transmitter Signal Element Timing	BA	113	DTE	
15	12	TSET	Transmitter Signal Element Timing	BS	114	DCE	
17	9	RSET	Receiver Signal Element Timing	BD	115	DCE	
18		LL	Local Loopback	LL	141	DTE	
21		RL	Remote Loopback	RL	140	DTE	
25		TM	Test Mode	TM	142	DCE	
7	4, 6,	S, G,	Signal Ground	AG	102	-	
1		F, G,	Shield / Frame Ground	FG	101	-	

POWER:

20 hours by one 9 Volt alkaline battery or 9V/100 mA stab. external source (2.5mm mono plug + on top) plus one 1.5 V AAA batt. for the DC source. Power LED is off, or blinking if the battery is more than 90% empty.

RS530 Interface	Balanced (V. 11)	Single Ended (V. 10)
Red LED	A min. 300mV > B	> 300mV higher S.G.
Green LED	B min. 300mV > A	> 300mV below S.G.
Input Impedance	> 2K Ω	> 4K Ω
Dynamic Response	max. 10Mb	Line monitor > 50Kb Ext. monitor > 1Mb
Pulse Trap	Faster than 20ns	Faster than 20ns
Source	galvanically separated 1.5V through 168 Ω	\pm 5V through 330 Ω
Termination	120 Ω balanced	2X 120 Ω to S.G.

RS530 Back Panel

The Comtest RS530 comes complete with two dual gender cables, Signal Strength Adapter, jumper cables, batteries, user's manual and case for transport.

RS530 BoxPanel

For further information, please contact: