SITE ANALYZER®

MODEL SA-1700 & SA-1700-P

EASY TO USE ANTENNA & CABLE TESTER (SA-1700) WITH DIGITAL POWER METER OPTIONS (SA-1700-P)

BIRD'S®
SITE MANAGEMENT SOLUTION FOR
PUBLIC SAFETY

*Flash feature allows easy **firmware upgrades** via e-mail or by downloading the upgrade off our WEBSITE: www.bird-electronic.com

Let Bird® Be an Extension of Your RF Design Team!

The Bird® Engineering Design Team provides **over 250** years of collective RF Engineering experience.

Our R & D / Design Engineers focus on **leading edge** technology, product **integrity** and **quality** control.

We have the **expertise** to provide a **standard** or **custom** product to suit an environment or a specific design application.

Bird® Electronic Corporation **designs** and **manufactures** a diverse range of products, from RF power meters and antenna analyzers to high power RF load resistors. This broad product offering requires an equally diverse design skills base.

Site Analyzer®

The frequency range is **25MHz - 1700MHz** and is pre-programmable for Emergency, Fire, Police, VHF, UHF, Tetra, Trunk TxRx, Trunk Rx, Trunk Tx, Priv TxRX, Priv Rx, Priv Tx, NPSPAC TxRx, NPSAC Rx, NPSPAC Tx, Cell TxRx, Cell Rx, Cell Tx, GSM TxRx, GSM Rx, GSM Tx, WLAN, and Mibitex. If the required pre-programmed band is not listed above, the user can also configure the instrument to display any frequency range between 25MHz and 1700 MHz.

• Easy operation for first-time, occasional or experienced users
• Digital Power Meter Option compatible with Bird power sensors
• Accurate and repeatable measurements
• Immunity to on-channel interference (+13 dBm) for testing at co-located antenna sites
• High-resolution color display
• Fast sweep rate
• On-screen comparison of live sweep and recalled trace
• Unlimited trace overlays per report to compare antennas and track performance over time

Identify Small Problems Before They Grow Into Big Headaches
The Site Analyzer's advanced design and high resolution color display help you detect minor problems before they become major headaches. Bird's instrument easily uncovers faults that elude less sophisticated testers. And the Site Analyzer's high directivity and low source match ensure accurate and repeatable Match and Fault Location measurements.
• Locate long range problems with 238 display points
• Pinpoint small problems with 60 dB dynamic range
• High resolution marker reports VSWR with the precision of expensive laboratory equipment
• Perform cable insertion loss measurements
• Flash feature allows easy firmware upgrades via e-mail

Superior Signal Immunity Lets You Test When It's Convenient
High ambient RF levels can limit the usefulness of other cable and antenna test instruments.

New Digital Power Measurement Solutions Option Now Available with the SA 1700P
(see next page for more details)
• ±5% of reading Accuracy!
• Digital Power Meter Options To Display Base Station Transmit Power Readings:
• Thruline® RF Power Measurements with the Model 5010 Directional Power Sensor
• Terminating Power Measurements with the Model 5011 Terminating Power Sensor

BIRD
Electronic Corporation
A Member of Bird Technologies Group

SA-1700, SA-1700P

	Band	Start	Stop
1	Full Range	25.00	1700.00
2	Low	30.00	54.00
3	Emergency	33.00	33.18
4	Fire	33.40	33.62
5	Police	37.00	37.46
6	Emergency	37.86	38.00
7	Police	39.00	40.00
8	Police	42.00	42.94
9	Police	44.62	45.90
10	Emergency	45.90	46.06
11	Fire	46.06	46.50
12	Emergency	47.41	47.70
13	Low	66.00	88.00
14	VHF	144.00	174.00
15	Fire	154.11	154.45
16	Police	154.65	154.97
17	Emergency	155.16	155.40
18	Police	155.40	155.70
19	Police	158.73	159.21
20	VHF	220.00	225.00
21	Tetra	380.00	470.00
22	Tetra	380.00	400.00
23	UHF	406.00	512.00
24	Tetra	410.00	430.00
25	UHF/Tetra	450.00	470.00
26	Fire/Police	453.00	454.00
27	Fire/Police	457.87	459.00
28	Police	460.00	460.53
29	Fire/Emerg	460.52	460.65
30	Emergency	462.95	463.18
31	Police	465.00	465.53
32	Fire/Emerg	465.52	465.63
33	Emergency	467.95	468.20
34	800/900	806.00	960.00
35	Tetra	806.00	921.00
36	Trunk TxRx	806.00	869.00
37	Trunk Rx	806.00	824.00
38	Trunk Tx	851.00	869.00
39	Priv TxRx	806.00	866.00
40	Priv Rx	806.00	821.00
41	Priv Tx	851.00	866.00
42	NPSPAC TxRx	821.00	869.00
43	NPSPAC Rx	821.00	824.00
44	NPSPAC Tx	866.00	869.00
45	Cell TxRx	824.00	894.00
46	Cell Rx	824.00	849.00
47	Cell Tx	869.00	894.00
48	GSM TxRx	880.00	960.00
49	GSM Rx	880.00	915.00
50	GSM Tx	925.00	960.00
51	WLAN	902.00	928.00
52	Mibitex	896.00	940.00

FREQUENCY SWEEP CHARACTERISTICS

SA-1700

Frequency Range:	25MHz - 1700 MHz (See Chart to Right)
Frequency Resolution:	25 kHz from 25-800 MHz
	50 kHz from 800-1700 MHz

MEASUREMENT CHARACTERISTICS

Return Loss	0 to -60 dB
Test Port	N-type female connector
Impedance	50
Trace Resolution	238 data points
Trace Storage Capacity	Stores 250 saved traces
Immunity to Interfering Signals	Rejects on-frequency signals up to +13 dBm.
Maximum Input Signal	+22 dBm
Sweep Rate	3 seconds with 238 data points
Setup Storage Capacity	Stores 12 saved setups

PERIPHERAL PORTS

Data transfer	9-pin RS-232 (DB9), compatible with PC serial port.

POWER

Internal	Rechargeable Li-Ion batteries. 3 hour minimum operating time. Auto shut-off conserves battery life.
External DC	9 to 16 Vdc, fused
External AC	90 to 264 Vac @ 45-66 Hz

ENVIRONMENTAL

Operating Temperature	-10° to 50° C (14° to 122° F)
Storage Temperature	-40° to 80° C (-40° to 176° F)
Humidity	95% max., (non-condensing)
Altitude	Up to 15,000 feet (4572 m)

FORM FACTOR

Dimensions	10.5" x 8.5" x 3.2" (267 mm x 216 mm x 81 mm)
Weight	5 lbs. (2 kg)

STANDARD ACCESSORIES

The Site Analyzer® includes Carrying Case, Instruction Manual, Serial Cable, PC Tool Software for Windows, AC Power Supply and Automotive Power Adapter.

OPTIONAL ACCESSORIES

Model	Description
CAL-MN-B	Calibration combo, (M) N
CAL-FN-B	Calibration combo, (F) N
CAL-ME-B	Calibration combo, (M) 7/16 DIN
CAL-FE-B	Calibration combo, (F) 7/16 DIN
5011	Terminating Power Sensor
5010	Directional Power Sensor
TC-MNMN-1.5	Test cable, 1.5 m., N (M) conn.
TC-MNMN-3.0	Test cable, 3 m., N (M) conn.
TC-MNFN-1.5	Test cable, 1.5 m., N (M)/N (F) conn.
TC-MNFN-3.0	Test cable, 3 m., N (M)/N (F) conn.
TC-MNFE-1.5	Test cable, 1.5 m., N (M)/7/16 DIN (F) conn.
TC-MNFE-3.0	Test cable, 3 m., N (M)/7/16 DIN (F) conn.
PA-MNME	Adapter, N (M) to 7/16 DIN (M).
PA-FNME	Adapter, N (F) to 7/16 DIN (M).
PA-MNFE	Adapter, N (M) to 7/16 DIN (F).
PA-FNFE	Adapter, N (F) to 7/16 DIN (F).
7002B870	Hard shell transit case.
SA-BATPAK	External battery pack.

Model 5010
Directional Power Sensor

DIGITAL POWER METER OPTION
DIRECTIONAL POWER SENSOR (MODEL 5010)
The Model 5010 provides customers a TOTAL RF POWER MEASUREMENT SOLUTION for Thruline (In-line) Power Measurements with Accuracy of ±5% of readings.

Model 5011
Terminating Power Sensor

NEW TERMINATING POWER SENSOR (MODEL 5011)
The Model 5011 provides customers a TOTAL RF POWER MEASUREMENT SOLUTION to measure Base Station Power and/or Broadcast Transmitter Power with Accuracy of ±5% of readings.