ANTENNA & CABLE MONITOR

ACCURATELY DETECTS ANTENNA SYSTEM

DEGRADATION AND FAILURES

Bird's Antenna & Cable Monitor is the solution for monitoring your transmission antenna systems. Service providers and self maintained end user's can rely on this monitor and alarm to keep their critical sites up and running. Designed to detect antenna and cable faults that transmitter-internal VSWR monitors may not detect, it also provides accurate in-line power measurement functionality.



PC Software Tool 7005A970 (Optional Accessory)

Optional Accessories:

Model	Description		
7005A970	PC software, displays Antenna		
	& Cable Monitor readings and		
	alarms, controls alarm set points		
ACM-RACK	19" rack shelf, mounts up to two		
	Antenna & Cable Monitors		
ACM-RACKU	19" rack shelf with universal power		
	supply (100 to 240 VAC, 50 to 60 Hz),		
	mounts up to two +11 to +26 VDC		
	Antenna & Cable Monitors		
ACM-SS15	Surge suppressor for 15-pin power		
	and alarm connector, compatible		
	with +11 to +26 VDC or \pm 36 to \pm 72 VDC		
	Antenna & Cable Monitor		
SUBCON-15/M-SH DB 15-pin connector			





- Worldwide systems include Tetra, Cellular and PCS with digital or analog modulation
- Other applications include 3G, AMPS, Broadcast, CDMA, CDMA 2000, DCS, EDGE, Government, GPRS, GSM, iDEN, Industrial, NPSPAC, Microwave, Military, Paging, Public Safety, Rail, SMR, TDMA, Tetrapol, Trunking, UHF, Utilities, VHF, W-CDMA and WLL
- Models available from 136-225 MHz, 225-520 MHz, 470-960 MHz, 960-2400 MHz
- Accurately monitors your antenna and cable system VSWR levels
- Integral coupler with high directivity optimizes measurement accuracy. Measures small changes in antenna VSWR with high feeder and interface losses.
- Provides alarms if an antenna or cable failure should occur
- Also monitors transmitter output power and includes low or high power alarms
- Measures true average power of signals with high peak-to-average characteristics works with any modulation!
- Measure forward and reflected power as well as VSWR and Return
 Loss
- The excellent passive intermod performance allows the unit to be inserted into multichannel systems with a single transmit/receive antenna with no degradation of receiver performance.
- Sample ports allow measurement of the forward and reflected signals without the need for system downtime
- Can be rack mounted at output of transmit combiner or linear power amplifier
- Local or remote set-up/operation via RS-232 port and PC software package. (For other telemetry options, such as TCP/IP, contact the factory)

BIRD® ANTENNA & CABLE MONITOR

Forward Power Measurement		Interface Port		
*Frequency Range:	136 - 225 MHz,	Connector:	Female DB-9, compatible with IBM PC	
	225 - 520 MHz,		AT serial port	
	470 - 960 MHz,	Protocol:	Serial RS-232, 9600 baud, no parity, 8	
	960 - 2400 MHz		data bits, 1 stop bit, no handshake	
Measurement Range:	2.5 to 100 W, contact factory to inquire about			
	other power measurement ranges	anges Physical and Environmental Specifications		
Power Accuracy	\pm 5% of reading, \pm 1 count at calibration frequencies	General:	Thruline [®] sensor for direct insertion in	
Frequency Response	136 - 225 MHz, ±10%		50-ohm line	
(band endpoints)	225 - 520 MHz, ±8%	RF Connectors:	N or 7/16 DIN, see chart below	
	470 - 960 MHz, ±5%	Maximum Line		
	960 - 2400 MHz, ±5%	Section Power:	Dependent on frequency and connector	
Insertion Loss:	0.1 dB, 136 - 960 MHz, 0.15 dB 960 - 2400 MHz		See chart below	
VSWR:	1.07, 136 to 960 MHz	Alarm/Power Connector:	15-pin male "D" connector	
	1.1, 960 to 2400 MHz, N Connectors	Operating Temperature:	0°C to 50°C	
	1.1, 960 to 2000 MHz, 7/16 Connectors	Storage Temperature:	-20°C to 80°C	
	1.2, 2000 to 2400 MHz, 7/16 Connectors	Humidity:	0 to 95% maximum (non-condensing)	
		Altitude:	Up to 3000 meters above sea level	
Reflected Power Measurement		Passive Intermodulation		
Directivity:	30 dB, 136 to 960 MHz, 26 dB, 960 to 2400 MHz	Products:	Less than -130 dBc	
2		Power Requirements:	+11 to +26 VDC or ±36 to ±72 VDC	
VSWR Alarm Characteristics		Dimensions:	4.75" (121 mm) wide (7.55" (192.mm) with	
Alarm Set Point:	1.3, 1.4, 1.5, 1.6, 1.7, 1.8 to 1		connectors), 4.2" (107mm) high, 1.06"	
Relay Contact Type:	Dry, Form C, relay contacts, common, normally		(27mm) deep	
	open, normally closed	Weight:	Less than 2 lbs. (0.9 kg)	
Contact Rating:	100 VDC @ 0.5 A	EMČ:	European Standard EN 61326-1:1997 +	
Visual Alarm:	Red LED will illuminate to indicate alarm		Addendums A1: 1998 and A2:2001 -	
Stimulus:	VSWR set point exceeded, response time		Electrical equip. for measurement,	
	proportional to overload		control and laboratory use	
Reset:	Local Mechanical reset switch	Safety:	European Standard EN 61010-1:2001 -	
	Remote input (Reset if VDC is 0 to +0.8 volts)	2	Safety Requirements - Electrical equip. for	
Monitor Ports			measurement, control and laboratory use -	
Connectors:	Female N, TNC or BNC		ECM Requirements.	
Coupling:	-63 dB approx.		·	
	Subject to changes in full-scale power			

MODEL STRUCTURE







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