

Introducing the TM70 Series Intrinsically Safe Radio Controllers

Intrinsically safe radio control for potentially explosive environments and hazardous locations.

Approved and certified for use in:

United States & Canada
Applicable Standards – CSA & UL 913

UL 913-2006

Class I Division I, Groups A, B, C, and D
Class II Division I, Groups E, F, and G
Zone 21, AEx iaD T135 C

International
Applicable Standards – ATEX

94/9/CE Directive

EX II 2 G D
EX ia IIB T4
Tamb.: -20°C – +70°C
INERIS 08ATEX0006



TM70/1IS

TM70/2IS



170 THORN HILL ROAD
WARRENDALE PA 15086
724-741-9000





TM70 Intrinsically Safe Radio Control Specifications

SYSTEM SAFETY	
Category 3 - EU Standard for Machine Control Safety	EN-954-1 EU Directives 99/5, 99/3, for CAT 3 – "Dual Processor Technology"
RF Type	"Supervised" Link – "GMSK" Data Modulation
Operator Vigilance	4 minute inactivity shuts down RF commands.
Self Test Diagnostics	Checks switch status at each startup
Intrinsic Safety	UL913-2006 & ATEX
SYSTEM APPROVALS – UL & ATEX	
<u>CSA/UL</u>	<u>ATEX/IECx</u>
Class I, Division 1, Groups A, B, C & D	II 2 GD
Class II, Division 1, Groups E, F & G	Ex ia IIC T4 Gb
Zone 21, Aex iaD T135° T4 IP65	Ex ia IIIC T135°C Db
	CE0080 - INERIS 08ATEX0006
	IECEX INE 09 0014
APPROVALS & STANDARDS	
Radio – FCC (USA)	Part – 90 (433-450 Mhz) & Part 15 (902-928 Mhz) "DUAL BAND" Synthesized Radio Design
Radio – IC (Canada)	902-928 MHZ
Electrical	CE, CSA, UL
Standards for EOT Cranes	CMAA ECMA SPEC 15
PERFORMANCE	
Frequency & Operating Parameters	"Plug-N-Play" Programmability in a removable E-eprom
Automatic Frequency avoidance feature	Automatically adjusts frequency to open channel (Listen before Transmit)
Response Time	100ms (Continuous updates) "Supervised Radio Link"
Control Mechanisms Customizable	2 Step Pushbuttons & Selector Switches
TRANSMITTERS	
Ingress Protection	IP65/NEMA 4
Weight with battery	18 oz./500 grams (TM70/1) – 22 oz./600 Grams (TM70/2)
Temperature	-4 - 158 F
Battery	BT06K-ATEX 4.8V @ 500mahr
Battery Life	8 Hr
RECEIVERS (Standard Non-Explosion Proof)	
Protection	IP65
Size	11.24"W x 8.03" T x 4.25" D
Power & Consumption	48, 115 & 230 VAC +- 10% 50/60 hz @ 20 W
Relays/Control Contacts	13, 21 or 29 outputs contacts rated @ 230VAC/8A res
Relays/CAT3 STOP	2-Forcibly Guided contacts @ 230 VAC / 6A res
Termination	Pre-wired Multi-conductor 18awg PVC UL1007 (Std)
Electrical Safety	Class II (En50178), UL
EXPLOSION PROOF (Optional)	Installed in NEMA 7 Enclosure (with Antenna Isolation & Transfer Switch Options)

