

REMTRON® Technical Specifications

21R14A Receiver

- 14 Control/1 Alarm/1 Safety relays
- 120 VAC Power Supply
- Maintained Link



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kilohertz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	14 control/1 alarm/1 safety relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Maximum Current Drain.....	0.12 Amps @ 115 VAC
Maintained Link.....	Receive at least one valid transmission each second to continue operation
Loss of Maintained Link.....	Safety shutdown, positive restart required

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL 508
Environmental Rating.....	NEMA 4

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Case Mounted or remote
Transfer Switch	Case Mounted 3-position, 3-pole power transfer switch
Housing Material.....	Metal (optional fiberglass and stainless steel)
Weight.....	10 lbs. (4.54 kg)
Dimensions.....	12" x 10" x 5" (30.48 cm x 25.4 cm x 12.7 cm)

REMTRON® Technical Specifications

21R14AZ Receiver

- 16 Ten-Amp Relays
- 115/230 VAC or 12/24 VDC Power
- Maintained Link

RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kilohertz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	14 control/1 alarm/1 safety relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	Standard 115 or 230 VAC, 1-phase, 50 to 60 Hz, 24 or 12 VDC, 24 VAC
Maximum Current Drain.....	0.12 Amps @ 115 VAC
Maintained Link.....	Receive at least one valid transmission each second to continue operation
Loss of Maintained Link.....	Safety shutdown, positive restart required

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	Class I, Div.1 & 2, Groups B, C, D
Environmental Rating.....	NEMA 7/8

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Remote mount
Transfer Switch	Case Mounted 3-position, 3-pole power transfer switch
Housing Material.....	Corrosion resistant cast aluminum
Weight.....	~37.125 lbs. (16.84kg)
Dimensions.....	16.38" x 16.38" x 8.69" (41.6 cm x 41.6 cm x 22.1 cm) or larger.

REMTRON® Technical Specifications

21R22 Receiver

- 22 Ten-Amp Relays
- 8 Analog Outputs
- 120 VAC Power Supply
- Maintained Link



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kiloherztz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	21 control/1 alarm/2 safety relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Maximum Current Drain.....	0.12 Amps @ 115 VAC
Maintained Link.....	Receive at least one valid transmission each second to continue operation
Loss of Maintained Link.....	Safety shutdown, positive restart required

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL 508
Environmental Rating.....	NEMA 4

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Case Mounted or remote
Housing Material.....	Standard industrial enclosure(metal, fiberglass, or stainless steel)
Weight.....	12 lbs. (5.44 kg)
Dimensions.....	14" x 12" x 6" (35.56 cm x 30.49 cm x 15.24 cm)

REMTRON® Technical Specifications

21R22Z Receiver

- 22 Ten-Amp Relays
- 8 Analog Outputs
- 120 VAC Power Supply
- Maintained Link
- NEMA 7/8 Enclosure



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kilohertz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	21 control/1 alarm/2 safety relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Maximum Current Drain.....	0.12 Amps @ 115 VAC
Maintained Link.....	Receive at least one valid transmission each second to continue operation
Loss of Maintained Link.....	Safety shutdown, positive restart required

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL 913
Environmental Rating.....	NEMA 7/8

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Remote Mount
Housing Material.....	Corrosion Resistant Cast Aluminum
Weight.....	~150 lbs (68 kg)
Dimensions.....	20.38" x 20.38" x 9.19" (51.8cm x 51.8cm x 23.2cm)



Technical Specifications 21R30 Receiver

30 10-Amp Relays
8 Analog Outputs
Maintained Link
115/230 VAC or 12/24 VDC Power



RF Characteristics

RF Unit.....	Microprocessor controlled PLL synthesizer with 85 channels
Frequency Range.....	902 to 928 Megahertz (MHz)
Channel Spacing.....	300 Kiloherztz (KHz)
Modulation.....	Packet Mode, Digital Frequency Modulation (FM) based on Manchester Code
Receiver Type.....	Dual Conversion FM
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Antenna.....	3" tuned element
Response Time.....	60 milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300-foot obstructed view, 1000-foot Line of Sight (unobstructed)
RF Approvals.....	License-free in North America
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A

Safety and Operational Characteristics

Relays.....	29 control/1 alarm/2 safety relays
Output Contacts.....	5 Amps @ 230 VAC
Maintained Link.....	Receive at least one valid transmission each second to continue operations
Loss of Maintained Link.....	Safety shutdown, positive restart required
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16 bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding ESTOP command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	115 or 230 VAC, 1-phase, 50 to 60 Hz, 24 or 12 VDC, 24 VAC
Maximum Current Drain.....	0.12 Amps @ 115 VAC

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Environmental Rating.....	NEMA 4
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL 508

Physical Characteristics

Case.....	Standard Industrial Enclosure (metal, fiberglass or stainless steel)
Connector.....	Terminal Strip Connection
Antenna.....	Case mounted or remote
Main Components.....	Surface-mount technology
Dimensions.....	14" x 12" x 8" min.

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REMTRON® Technical Specifications

22R08A Receiver

- 8 Ten-Amp Relays
- 12 VDC Power Supply



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kilohertz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	4 form-C control relays and 4 form-A control relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	12 VDC power supply

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL 508
Environmental Rating.....	NEMA 4

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Case Mounted or remote
Housing Material.....	Metal (optional fiberglass and stainless steel)
Weight.....	8.125 lbs. (3.69 kg)
Dimensions.....	8" x 6" x 4" (20.32 cm x 15.24 cm x 10.16 cm)

REMTRON® Technical Specifications

22R08AZ Receiver

UL Class 1 Division 1, Groups B, C, and D

- 4 form-A Control Relays
- 4 form-C Control Relays
- 120 VAC Power Supply
- NEMA 7/8 Enclosure
- 9 ft. Remote Antenna Kit



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kilohertz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Relays.....	4 form-C control relays and 4 form-A control relays
Output Contacts.....	5 Amps @ 230 VAC
Addressing Safety.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Maximum Current Drain.....	0.12 Amps @ 115 VAC

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
UL Rating.....	UL Class 1 Division 1, Groups B, C, and D
Environmental Rating.....	NEMA 7/8

Physical Characteristics

Connector.....	Terminal Strip Connection
Antenna.....	Remote mount
Housing Material.....	Corrosion resistant cast aluminum
Weight.....	~37.125 lbs. (16.84kg)
Dimensions.....	12.32" x 14.32" x 6.32" (31.3 cm x 36.4 cm x 16.05 cm)

REMTRON® Technical Specifications

25R11A Receiver

- 11 Ten-Amp Relays Plus 1 Safety Relay
- 120 VAC Power Supply
- 6 ft. Wiring Harness Connection



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kiloherztz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Maintained Link.....	Receive at least one valid transmission each second to continue operations
Loss of Maintained Link.....	Safety shutdown, positive restart required
Addressing.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Transmitter Registration.....	AutoLink™ button

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
Environmental Protection.....	Humisealed electronics
IP Rating.....	IP 65

Physical Characteristics

Connector.....	6 ft. Wiring Harness Connection
Antenna.....	Top mounted or remote
Housing Material.....	Aluminum Extruded
Weight.....	4 lbs. (1.814 kg)
Dimensions.....	10" x 5" x 2.5" (25.4 cm x 12.7 cm x 6.35 cm)

REMTRON® Technical Specifications

25R15A Receiver

- 14 Control/1 Alarm/1 Safety Relay
- 120 VAC Power Supply
- 6 ft. Wiring Harness Connection



RF Characteristics

RF unit.....	Microprocessor controlled PLL synthesizer with up to 85 different channels
Frequency Range.....	902-928 Megahertz (MHz)
Channel Spacing.....	300 Kiloherztz(KHz)
Modulation.....	Packet Mode, Digital Frequency, Modulation(FM) based on Manchester code
Receiver Type.....	Dual Conversion FM
FCC ID #.....	EGT810RX
Industry Canada Certification #.....	249 710 2624A
Sensitivity.....	1 μ V usable
IF Bandwidth.....	180 KHz
Response Time.....	60 Milliseconds
Update Rate.....	16 packets per second command, 4 packets per second idle
Range.....	300- ft. obstructed view, 1000-ft. line of sight (unobstructed)
RF approvals.....	License-free in North America
Antenna.....	3" tuned element

Safety and Operational Characteristics

Maintained Link.....	Receive at least one valid transmission each second to continue operations
Loss of Maintained Link.....	Safety shutdown, positive restart required
Addressing.....	16-bit, 65,535 unique addresses with 85 channels providing over 5 million variations
Safety Decoding.....	16-bit Cyclic Redundancy Codes (CRC) check
Safety Stop.....	Over-riding Stop command with safety relay
Start-Up Safety.....	Start inhibited if controls pressed before start
Status Indications.....	Full function diagnostics LED indicators for Power, Signal and Output
Power Requirements.....	120 VAC power supply
Transmitter Registration.....	AutoLink™ button

Environmental Characteristics

Temperature Range.....	-20° to +160° F (-29° to +71° C)
Humidity Range.....	0-97% maximum non-condensing
Environmental Protection.....	Humisealed electronics
IP Rating.....	IP 65

Physical Characteristics

Connector.....	6 ft. Wiring Harness Connection
Antenna.....	Top mounted or remote
Housing Material.....	Aluminum Extruded
Weight.....	4 lbs. (1.814 kg)
Dimensions.....	10" x 5" x 2.5" (25.4 cm x 12.7 cm x 6.35 cm)