

Standard Telemetry Products

Emhiser Research, Inc. designs and manufactures a complete line of airborne and ground-based telemetry equipment designed specifically for harsh military applications. Our tested and proven products are qualified on numerous high profile defense programs.

This catalog contains technical bulletins of many of our more common products. If these products do not meet your exact specifications, give us a call to discuss your requirements.

- Wideband DC Coupled Transmitters and Receivers
- Digital Transmitters and Receivers
- Video Transmitters and Receivers
- Telemetry Transmitters and Receivers
- FSK Transmitters and Receivers



EMHISER RESEARCH, INC.

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E-mail: info@emhiser.com

Web: www.emhiser.com

Digital Receiver Model EDR-09DEA Series

9 Cubic Inches Signal Strength

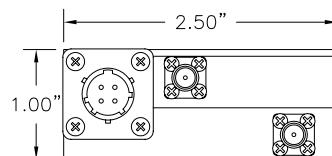
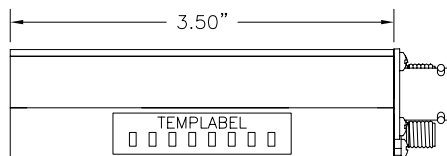
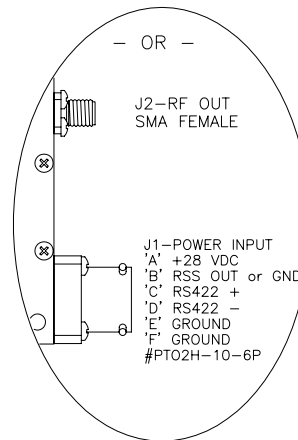
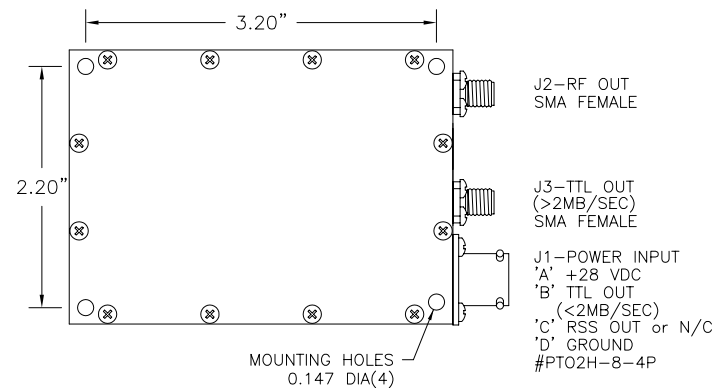
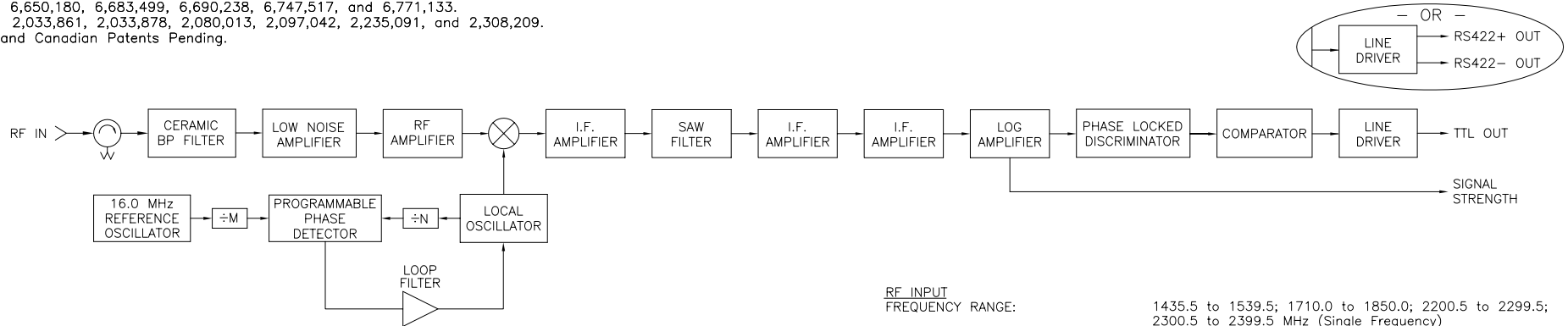
AC Coupled Single Frequency 28 VDC

Protected by One or More of the following Patents:

US: 5,091,706, 5,097,230, 5,311,152, 5,497,509, 5,802,462, 6,404,292, 6,411,237, 6,417,738, 6,650,180, 6,683,499, 6,690,238, 6,747,517, and 6,771,133.

Canadian: 2,033,861, 2,033,878, 2,080,013, 2,097,042, 2,235,091, and 2,308,209.

Other US and Canadian Patents Pending.



RF INPUT

FREQUENCY RANGE:

IMPEDANCE:

VSWR:

POWER:

NOISE FIGURE:

SIGNAL STRENGTH OUTPUT:

LO'S/IF'S

STABILITY:

1ST I.F.:

IF BANDWIDTH:

HARMONIC AND SPURIOUS LEVEL:

1435.5 to 1539.5; 1710.0 to 1850.0; 2200.5 to 2299.5;
2300.5 to 2399.5 MHz (Single Frequency)

50 Ohms Nominal

1.5:1 Maximum

+10 dBm Maximum without Damage

4 dB Maximum

Dependent upon Bit Rate. +0.3 VDC Nominal at Threshold Sensitivity,
+5 VDC Nominal at Threshold Sensitivity + 50 dB

Within $\pm 0.002\%$ over -20°C to $+70^{\circ}\text{C}$

140 MHz

1.2 X Bit Rate Nominally

-50 dB Maximum

DIGITAL OUTPUT

BIT RATE:

OUTPUT LEVELS:

100 Bits/Sec to 15 MBits/Sec Maximum (Specify)
TTL or RS422 Compatible (Specify)

POWER REQUIREMENTS

INPUT VOLTAGE:

INPUT CURRENT:

+28 ± 4 VDC, Reverse Polarity Protected

550 mA Maximum

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE:

VIBRATION:

SHOCK:

ACCELERATION:

ALTITUDE:

HUMIDITY:

Operating: -20°C to $+70^{\circ}\text{C}$; Storage: -54°C to $+125^{\circ}\text{C}$

14 G's, Random, Standard Haystack, 20 Hz to 2 KHz, 3 Axes

1/2 Sine, 100 G's Pk, 11 ms, 3 Axes

100 G's, 3 Axes

Unlimited

To 95% at any Temperature forming Frost or Condensation

PHYSICAL CHARACTERISTICS

DIMENSIONS:

WEIGHT:

Per Outline Drawing

9 oz. Maximum

DATE	05 07 08	 EMHISER RESEARCH, INC. 2705 OLD HIGHWAY 40 WEST TEL: 775-345-2705 P.O. BOX 189 VERDI, NEVADA FAX: 775-345-2484 89439-0189 U.S.A. EMAIL: INFO@EMHISER.COM
DWN	L3	
APVD		
QC		
CAGE CODE IDENT NO.	60666	DIGITAL RECEIVER/RSS SINGLE FREQUENCY, AC COUPLED 1435.5 TO 2399.5 MHZ (4 BANDS)
		MODEL NO. EDR-09DEA SERIES



Digital Receiver Model EDR-11DEA Series

11 Cubic Inches Signal Strength

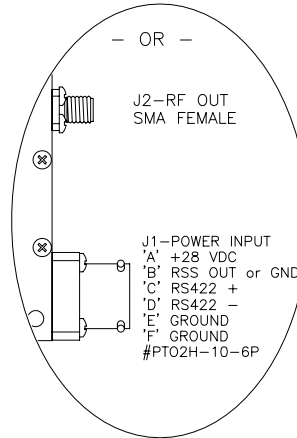
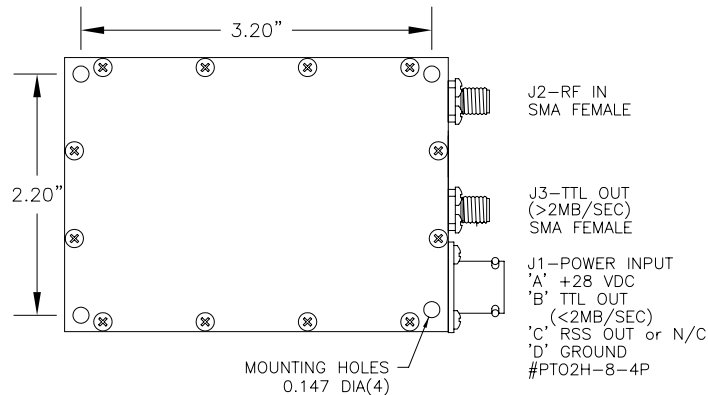
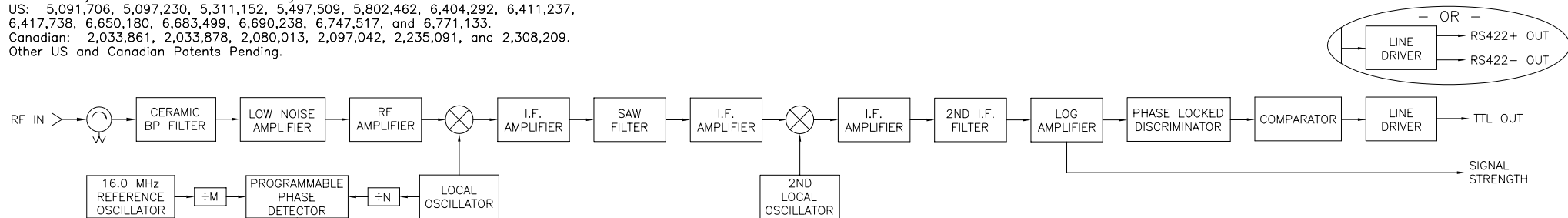
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RF INPUT

FREQUENCY RANGE:

IMPEDANCE:

VSWR:

POWER:

NOISE FIGURE:

SIGNAL STRENGTH OUTPUT:

LO'S/IF'S

STABILITY:

1ST I.F.:

2nd I.F.:

IF BANDWIDTH:

HARMONIC AND SPURIOUS LEVEL:

DIGITAL OUTPUT

BIT RATE:

OUTPUT LEVELS:

POWER REQUIREMENTS

INPUT VOLTAGE:

INPUT CURRENT:

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE:

VIBRATION:

SHOCK:

ACCELERATION:

ALTITUDE:

HUMIDITY:

PHYSICAL CHARACTERISTICS

DIMENSIONS:

WEIGHT:

1435.5 to 1539.5; 1710.0 to 1850.0; 2200.5 to 2299.5;
2300.5 to 2399.5 MHz (Single Frequency)

50 Ohms Nominal

1.5:1 Maximum

+10 dBm Maximum without Damage

4 dB Maximum

Dependent upon Bit Rate. +0.3 VDC Nominal at Threshold Sensitivity,
+5 VDC Nominal at Threshold Sensitivity + 50 dB

Within $\pm 0.002\%$ over -20°C to $+70^{\circ}\text{C}$

140 MHz

21.4 MHz

1.2 X Bit Rate Nominally

-50 dB Maximum

100 Bits/Sec to 2 MBits/Sec (Specify)

TTL or RS422 Compatible (Specify)

+28 ± 4 VDC, Reverse Polarity Protected

600 mA Maximum

Operating: -20°C to $+70^{\circ}\text{C}$; Storage: -54°C to $+125^{\circ}\text{C}$

14 G's, Random, Standard Haystack, 20 Hz to 2 KHz, 3 Axes

1/2 Sine, 100 G's Pk, 11 ms, 3 Axes

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DWN	L3	
APVD		
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CAGE CODE IDENT NO.	60666	DIGITAL RECEIVER/RSS SINGLE FREQUENCY, AC COUPLED 1435.5 TO 2399.5 MHZ (4 BANDS)
		MODEL NO. EDR-11DEA SERIES 

Digital Receiver Model EDRC-09DEA Series

9 Cubic Inches Signal Strength

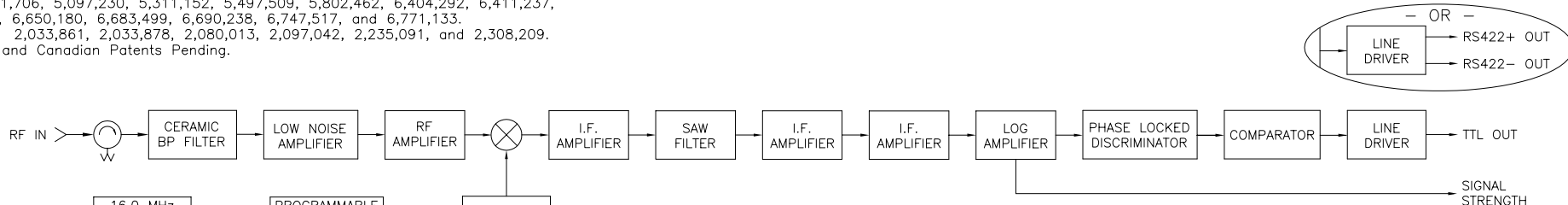
AC Coupled Channelized 28 VDC

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RF INPUT

FREQUENCY RANGE:

FREQUENCY SELECTION:

IMPEDANCE:

VSWR:

POWER:

NOISE FIGURE:

SIGNAL STRENGTH OUTPUT:

LO'S/IF'S

STABILITY:

1ST I.F.:

IF BANDWIDTH:

HARMONIC AND SPURIOUS LEVEL:

DIGITAL OUTPUT

BIT RATE:

OUTPUT LEVELS:

POWER REQUIREMENTS

INPUT VOLTAGE:

INPUT CURRENT:

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE:

VIBRATION:

SHOCK:

ACCELERATION:

ALTITUDE:

HUMIDITY:

PHYSICAL CHARACTERISTICS

DIMENSIONS:

WEIGHT:

1435.5 to 1539.5; 1710.0 to 1850.0 2200.5 to 2299.5;
2300.5 to 2399.5 MHz Channelized in 0.5 MHz Steps
Via MDM-15P Connector
50 Ohms Nominal
1.5:1 Maximum
+10 dBm Maximum without Damage
4 dB Maximum
Dependent upon Bit Rate. +0.3 VDC Nominal at Threshold Sensitivity,
+5 VDC Nominal at Threshold Sensitivity + 50 dB

Within $\pm 0.002\%$ over -20°C to $+70^{\circ}\text{C}$

140 MHz

Dependent Upon Bit Rate

-50 dB Maximum

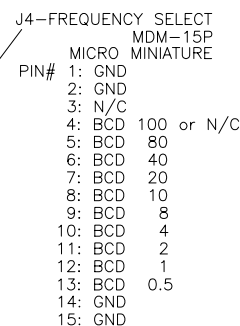
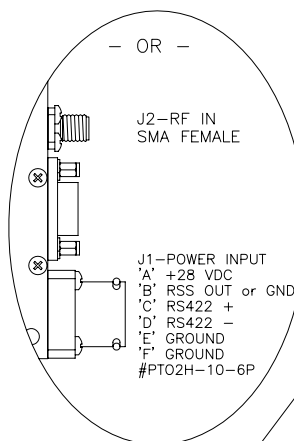
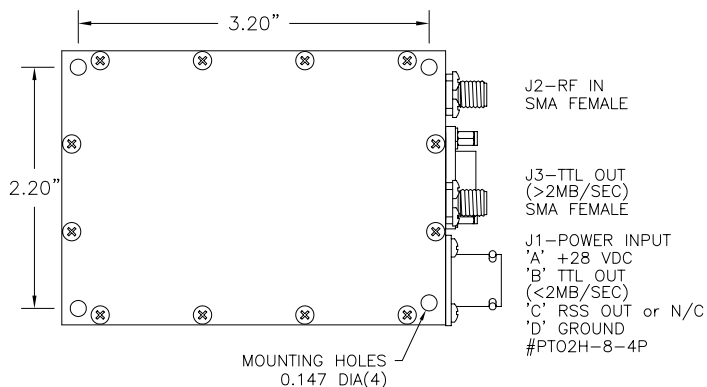
100 Bits/Sec to 15 MBits/Sec Maximum (Specify)

TTL or RS422 Compatible (Specify)

+28 ± 4 VDC, Reverse Polarity Protected
600 mA Maximum

Operating: -20°C to $+70^{\circ}\text{C}$; Storage: -54°C to $+125^{\circ}\text{C}$
14 G's, Random, Standard Haystack, 20 Hz to 2 KHz, 3 Axes
1/2 Sine, 100 G's Pk, 11 mS, 3 Axes
100 G's, 3 Axes
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To 95% at any Temperature forming Frost or Condensation

Per Outline Drawing
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DWN	L3	
APVD		DIGITAL RECEIVER, SIGNAL STRENGTH CHANNELIZED, AC COUPLED 1435.0 TO 2399.5 MHZ (4 BANDS)
QC		
CAGE CODE IDENT NO.	60666	MODEL NO. EDRC-09DEA SERIES

Digital Receiver Model EDRC-11DEA Series

11 Cubic Inches Signal Strength

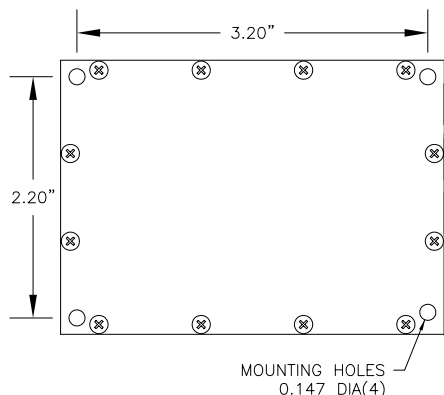
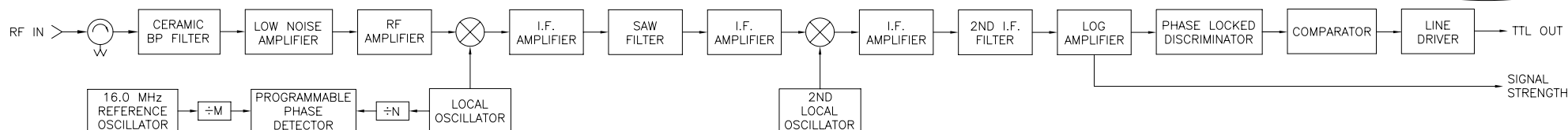
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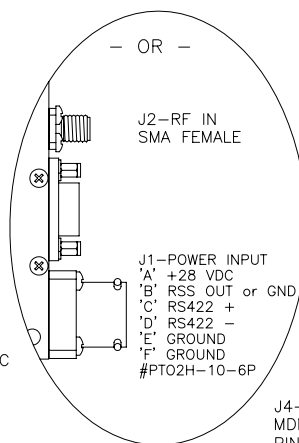
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J2—RF IN
SMA FEMALE

J3—TTL OUT
(>2MB/SEC)
SMA FEMALE

J1—POWER INPUT
'A' +28 VDC
'B' TTL OUT
(<2MB/SEC)
'C' RSS OUT or N/C
'D' GROUND
#PT02H-8-4P



J4—FREQUENCY SELECT
MDM-15P

PIN#
1: GND
2: GND
3: N/C
4: BCD 100 or N/C
5: BCD 80
6: BCD 40
7: BCD 20
8: BCD 10
9: BCD 8
10: BCD 4
11: BCD 2
12: BCD 1
13: BCD 0.5
14: GND
15: GND

RF INPUT

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FREQUENCY SELECTION:

IMPEDANCE:

VSWR:

POWER:

NOISE FIGURE:

SIGNAL STRENGTH OUTPUT:

LO'S/IF'S

STABILITY:

1ST I.F.:

2nd I.F.:

IF BANDWIDTH:

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DIGITAL OUTPUT

BIT RATE:

OUTPUT LEVELS:

POWER REQUIREMENTS

INPUT VOLTAGE:

INPUT CURRENT:

ENVIRONMENTAL SPECIFICATIONS

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CAGE CODE IDENT NO. 60666		DIGITAL RECEIVER, SIGNAL STRENGTH CHANNELIZED, AC COUPLED 1435.5 TO 2399.5 MHZ (4 BANDS)
MODEL NO. EDRC-11DEA SERIES		