



## TETRA Digital Channelized Repeater

### FEATURES

Eyecom D-series Digital RF Repeater utilizes advanced digital IF and High speed FPGA technology. This Digital Repeater is able to meet all site conditions using our IP Web Browser GUI, allowing fast and accurate field deployment.

Digital Time Slot based ALC & Squelch.

Remote NMS connection is available via an External Ethernet Modem or 3G Modem. The GUI can also be viewed remotely via an IP connection. SNMP v3 is Standard.

Housed in an Outdoor IP65 wall mount enclosure.



Module No.	CR380	
Part No.	HCRTD-A-WM	
	Uplink	Downlink
Frequency Range *	380 ~ 385 MHz	390 ~ 395 MHz
Operational Bandwidth	5 MHz	5 MHz
Duplex Spacing	10 MHz	10 MHz
Number of Carriers	1 ~ 12	1 ~ 12
Filter Bandwidth of Carriers (GUI Selectable; TEDS Compliant)	30 / 60 / 120 / 180 KHz	30 / 60 / 120 / 180 KHz
RF Monitoring Ports	-40 dBc	-40 dBc
Gain	88 dB (± 2dB)	88 dB (± 2dB)
Gain Adjustment Range	30 dB in 1dB Steps	30 dB in 1dB Steps
Pass Band Ripple	≤ ±2 dB	≤ ±2 dB
Max Composite Output Power	30 dBm (± 2dB)	36 dBm (± 2dB)
AGC / Squelch	Digital Time Slot based	N/A
Oscillation Detection and Handling	When Oscillation is detected, Gain automatically drops by 30dB	
In-Band IMD	≤ -60 dBc	≤ -60 dBc
Spurious	≤ -36 dBm @ 9 kHz ~ 1 GHz; ≤ -30 dBm @ 1 GHz ~ 12.75 GHz	
AGC Range	20 dB	20 dB
VSWR	≤ 1.5 : 1	≤ 1.5 : 1
Noise Figure @ Max Gain	≤ 5 dB	≤ 5 dB
Group Delay (@ 30 KHz Filter BW)	≤ 14 μs	≤ 14 μs
Alarm Detection	High Temperature; Power Supply Failure; HPA and LNA Failure and other Parameters outlined in the User Manual.	



<b>Local Alarm Indications</b>	<ol style="list-style-type: none"> <li>1. LED alarm display</li> <li>2. Laptop via local RJ-45 Port (IP Web Browser GUI)</li> </ol>
<b>Remote Alarm Connection</b>	Ethernet Modem or 3G Modem via RJ-45 Port (IP Web Browser GUI); SNMP v3 (with available MIB File)
<b>Input / Output Configuration</b>	DL / UL combined port
<b>Connectors</b>	Donor and DAS Ports: N-F; RF Monitoring Ports: SMA-F Dry Contact: DB12 (4 Inputs and 4 Outputs)
<b>Impedance</b>	50Ω
<b>MTBF</b>	86,000 hours
<b>Power Supply</b>	90 ~ 265V AC, 50 ~ 60 Hz
<b>Power Consumption</b>	≤ 150 watts
<b>Operating Temperature</b>	-20 °C to +55 °C
<b>Operating Humidity</b>	0 ~ 95 % (non-condensing)
<b>Sealing / Cooling</b>	IP65 / Convection
<b>Dimensions (W × D × H)</b>	385 x 285 x 174 mm
<b>Weight</b>	≤ 18 kg

Eyecom's policy of continual improvement requires us to reserve the right to change the specifications without notice.

Unit complies with ETSI TS-101789-1, EN-303035-1 and EN-50121.

\* The Series of TETRA Digital Channelized Repeater includes 330 ~ 360 MHz, 380 ~ 400 MHz, 410 ~ 430 MHz, 450 ~ 470 MHz.

Please specify the exact frequency when placing an Order.

Eyecom Product Specification EMK-TS5211

Established in 1996 by Deltec New Zealand Ltd, Eyecom is leading manufacturer of DAS Systems and Components for TETRA, MOTOTRBO™, P25, DMR/PMR and Cellular. Included in our VHF to 6 GHz Portfolio are **Advanced Digital Repeaters and Fiber DAS** Systems incorporating Proprietary FPGA Algorithms, **Low PIM** Passive Components, TMA's, BTS and IBS Antennas and Water/Vapor Proof & Fire Resistant Leaky Coax Cable. Eyecom specializes in **"Enclosed Space"** Coverage Solutions, offering IP65, IP68 and **ATEX** Compliant Repeaters, Fiber DAS, Couplers/Dividers and all required Passive components for Metros and Road/Rail/Service Tunnels. Eyecom also has an Under-Construction Tunnel Communications System, including RFID for personnel and equipment.

With R&D Facilities and manufacturing in New Zealand and Singapore; low cost manufacturing in Guangzhou; Asia Sales, Finance and Administration in Hong Kong; Sales Offices in the UK and India; along with our newly established Global Technical Marketing and Americas Sales Facility in Atlanta, The Eyecom Group spans the Globe with **EXCELLENCE**.



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