

RI 208 CCN 8x8 690 - 2700 MHz

High performance CCN with very fast attenuation setting in compact format

Features:

- 8x8 matrix with 64 independent attenuators
- 690 - 2700 MHz RF frequency range
- 95 dB attenuation range
- 0.5 dB attenuation step
- 4 W maximum RF input power
- 19", 4HU rack mountable
- LabView drivers
- Remote control via LAN

Overview

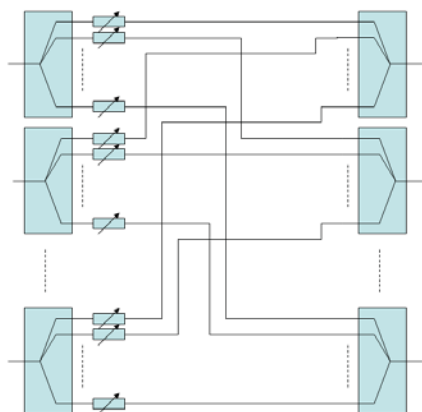
The Ranatec RI 208 is a 8x8 high performance Coaxial Cellular Network (CCN) occupying only 4HU in a 19" rack. All attenuators can be set up to 10.000 times per second and are latched simultaneously. This enables implementation of dynamic channel amplitude models. Several CCN's can also be synchronized together for MIMO testing, where 8 pcs 8x8 CCNs is a common configuration.

Hardware

The Ranatec RI 208 uses FPGA technology combined with a proprietary internal bus protocol to achieve very fast attenuation setting, typically 0.1 ms. Each attenuator has an attenuation range of 95 dB and can be set in 0.5 dB steps. The isolation between different channels is better than 100 dB.

Applications

The RI 208 CCN is designed for mobile network testing applications.



Principal block diagram for NxN CCN



Ranatec RI 208 is a very fast and compact CCN suitable for mobile network testing in laboratory environment. (picture shows a 2 HU unit)

Preliminary

Electrical Specification

| | |
|--------------------------|----------------|
| Number of channels | 8x8 |
| RF frequency range | 690 - 2700 MHz |
| RF input power | 4 W maximum |
| Attenuation range | 0-95 dB |
| Attenuation step size | 0.5 dB |
| Attenuation setting time | 0.1 ms |
| Insertion loss | 25 dB |
| VSWR | 2.0:1 |
| Channel isolation | 100 dB |

Mechanical specification

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|----------------------|-----------|
| Size | 19", 4 HU |
| RF input connectors | TNC (F) |
| RF output connectors | TNC (F) |

Environmental specification

| | |
|-----------------------|--------------|
| Operating temperature | 0 to 55 °C |
| Storage temperature | -40 to 80 °C |
| Relative humidity | 10 to 90 % |

Ordering

| | |
|--------|---------|
| RI 208 | CCN 8x8 |
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