Compact Converter Manual Addendum – WR3.4

WR3.4CCU Specifications	
LO Input Frequency (GHz)	18.33.-27.5
P_{LO}, LO Input Power (dBm, typical / damage)	0-6 / 12
IF Input Frequency (GHz)	0.01-40
P_{IF}, IF Input Power (dBm, ~P1dB / ~P0.1dB)	-1 / -11
P_{IF}, IF Input Power (dBm, damage)	6
RF Output Frequency (GHz)	220-330
RF Output Flange	WR-3.4 UG-387/U-M
LO Input Connector	2.92mm(f)
IF Input Connector	2.92mm(f)
Conversion Loss (typ., dB)†	~12
Operating Temperature (Typical / Recommended)	25°C / 20-30°C
Typical Dimensions (in., without footplate)	5.00 x 3.50 x 1.50

†Conversion Loss is defined as the intrinsic mixer conversion loss without any external amplifiers.

WR3.4CCD Specifications	
LO Input Frequency (GHz)	18.33-27.5
P_{LO}, LO Input Power (dBm, typical / damage)	0-6 / 12
IF Output Frequency (GHz)	0.0001-40
P_{RF}, RF Input Power (dBm, ~P1dB / ~P0.1dB)	-1 / -11
P_{RF}, RF Input Power (dBm, damage)	6
IF Amplifier Gain (dB)†	~12
RF Input Frequency (GHz)	220-330
RF Input Flange	WR-3.4 UG-387/U-M
LO Input Connector	2.92mm(f)
IF Output Connector	2.92mm(f)
Conversion Loss (typ., dB)††	~12
Operating Temperature (Typical / Recommended)	25°C / 20-30°C
Typical Dimensions (in., without footplate)	5.00 x 3.50 x 1.50

†CCD modules include an IF amplifier with ~12dB gain.
††Conversion Loss is defined as the intrinsic mixer conversion loss without any external amplifiers.

General Notes:

- VDI CCs include a single-volt power supply.
- Conversion Loss performance is specified at ~1 GHz IF. Conversion loss increases as a function of IF, at a rate of ~1.5dB/10GHz, up to the specified Maximum IF Frequency. Performance is typical with reduced performance at band edges.
- RF filters can be used to eliminate one sideband of the CCU RF output. Contact VDI for more information.
- RF amplifiers can be used to increase the CCU RF output power. Contact VDI for more information.
- Where available, an input isolator will smooth the required LO input power vs. frequency.