

Communications & Power Industries IOT Transmitter



VIL410 with
4 port circulator

This high power amplifier utilizes the CPI BMD VKL9130A1 IOT and the CPI BMD VSL3616 GaN SSPA and highly stable power supply for high gain, high efficiency and excellent phase and amplitude stability.

With a history of producing high quality products, we can help you with your IOT transmitter.

Contact us at BMDMarketing@cpii.com or call us at +1 978-922-6000.

FEATURES:

- 30 kW CW, 1.3 GHz
- Liquid cooled
- GaN Solid state power amplifier driver
- Four port circulator (optional)
- Superior stability, phase and amplitude ripple

BENEFITS:

- Highest CW power amplifier
- User friendly control and operation
- Compatible with EPICS interface
- Fully protected from RF output short/open (with 4-port circulator)

APPLICATIONS:

- Superconducting RF accelerators

CPI IOT Transmitter: VIL410

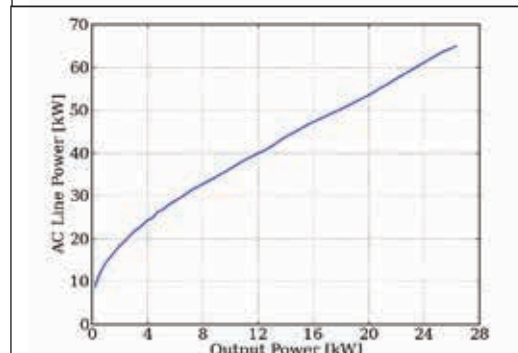
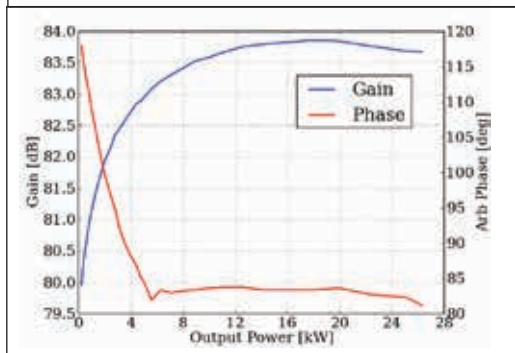
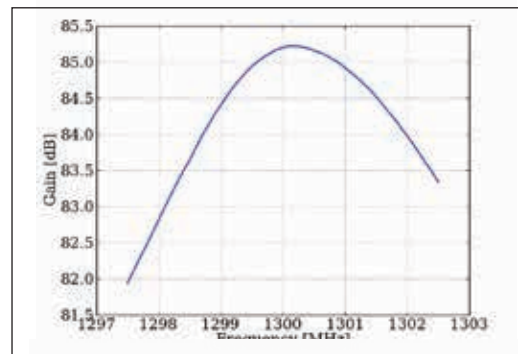
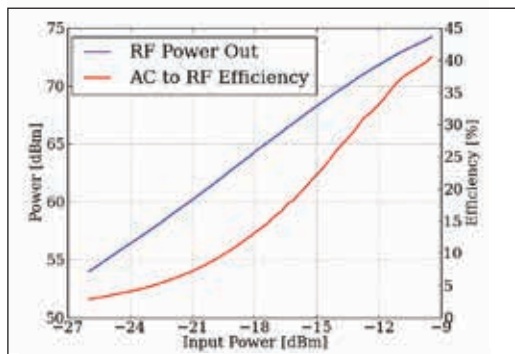
Specifications

Frequency Range	1.2975 to 1.3025 GHz
RF Output	30 kW CW nominal, adjustable from 2 kW to 30 kW
Duty cycle	CW and pulsed
Power Gain	82 dB minimum
Output VSWR	6:1 maximum
SNR	-70 dBc minimum
Amplitude stability*	0.2%/20 seconds with constant RF input with coolant +/- 0.2°C
Amplitude ripple*	0.1% rms after 20 minute warm up, coolant +/- 0.2°C
Phase ripple*	±8° maximum
Phase pushing	0.2%/20 seconds with constant RF input with coolant +/- 0.2°C

* Stability and Ripple measurements are specified after warm-up is complete and are dependent upon ambient and coolant conditions being well controlled.

Specifications

Prime power	380 VAC (3phase with neutral) 50/60 Hz
Ambient temperature	+15°C to +25°C operating
Current (service rating)	200 A
Current draw	122 Arms
Shock and vibration	Ground benign (typical transportation)
Cooling	Water, +20 to +35, 18 GPM (restricted temperature range for tighter stability)
RF Input connection	N-Type female, front panel
RF Output connection	WR650 waveguide
Control I/O	Ethernet
Dimensions (width)	73 in (185 cm) 172 in max. with circulator
Dimensions (height)	81 in (206 cm)
Dimensions (depth)	37 in (94 cm) 41 in max. with circulator



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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

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