

# HIGH POWER AMPLIFIER



## R&K-A1300BW10-6372R



- All Solid-State Amplifier
- Frequency Range : 1300MHz ± 5MHz
- Output Power : 16kW (min.) @ 1dB Comp.
- CW、100% DUTY CAPABILITY
- VERY HIGH RELIABILITY

### SPECIFICATIONS @ +25°C

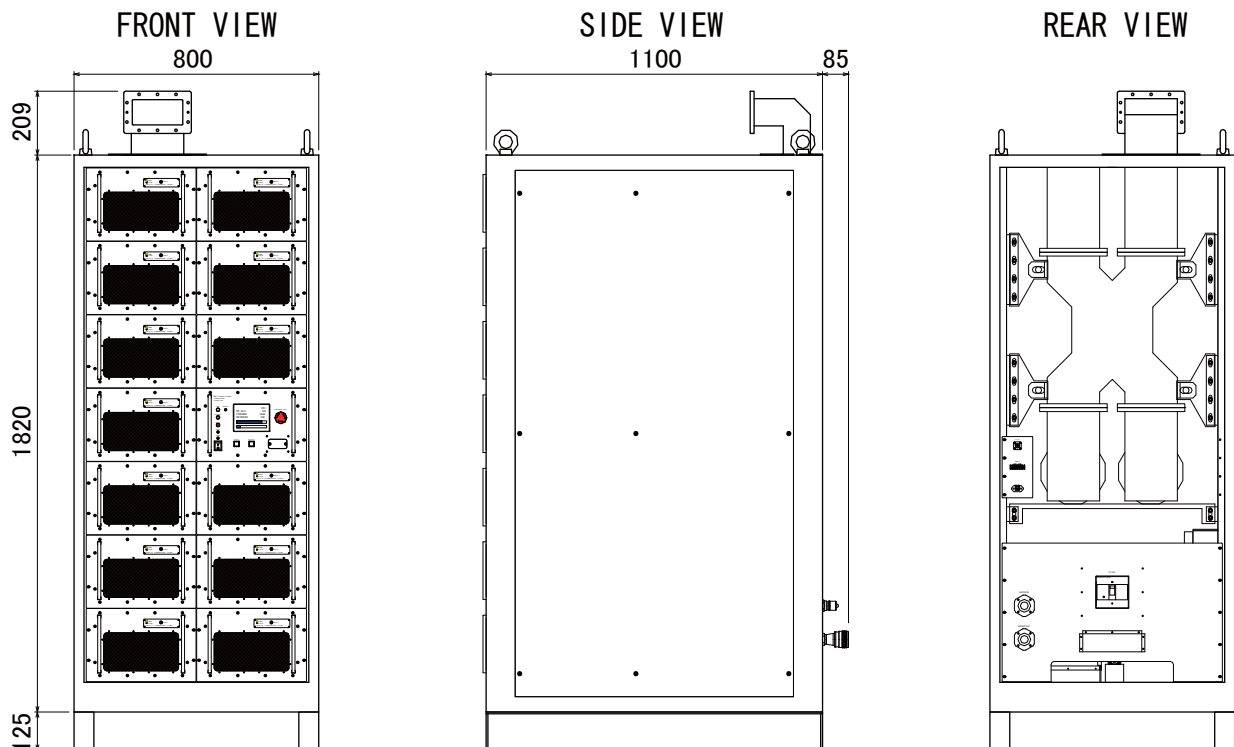
Frequency Range	: 1300MHz ± 5MHz
Small Signal Gain	: +63.0dB (min.)
Output Power	: 16kW (min.) @ 1dB Comp.
Gain Flatness	: ±2.0dB (max.) @ Po=1kW~16kW
Phase Stability	: ±10° (max.) @ Po=1kW~16kW
Harmonics	: -45.0dBc (max.) @ Po=16kW
Spurious	: -60.0dBc (max.) @ Po=16kW
Impedance	: 50Ω
Input VSWR	: 1.3 (max.)
Maximum RF Input Power	: +10.0dBm
AC Supply Input	: AC200V ± 10% / 3φ, 50/60Hz, 52kVA
Operating Temperature	: + 5°C to +40°C
Storage Temperature	: -15°C to +55°C
Connectors	: RF - IN N - FEMALE RF - OUT WR650
Size	: (W)800mm × (D)1100mm × (H)1820mm (Excluding Projection)
Weight	: 1200.0kg (max.)
Cooling	: Forced Air Cooling and Water Cooling
Protection Circuits	: Over Temperature Protection Power Supply Voltage Protection Output Over Power Protection
Metering	: R&K Multi Monitoring System
Other	: With Output Circulator

### HOW TO ORDER

Model Name  
R&K-A1300BW10-6372R OP XX Option: Ask

### OUTLINE DRAWING

※ IN MILLIMETERS

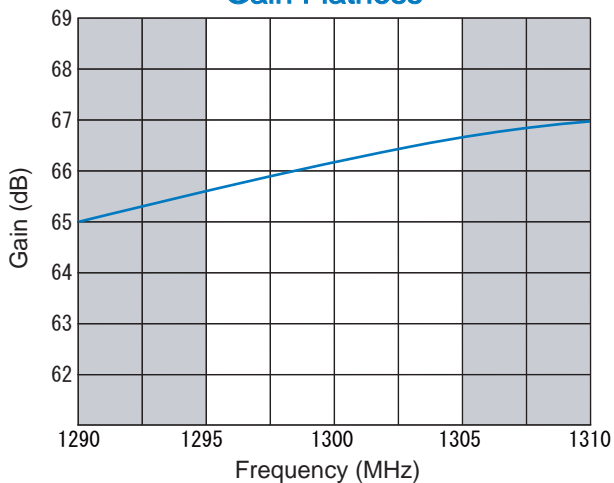


R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.

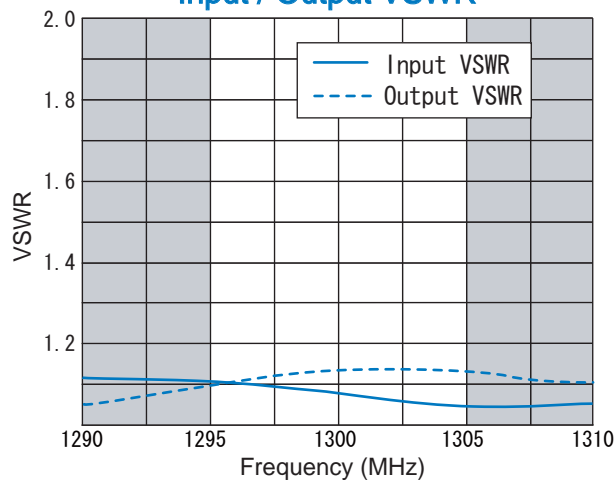
## R&K Company Limited

721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan  
Tel: +81-545-31-2600 E-mail: info@rkco.jp  
Fax: +81-545-31-1600 URL: http://rk-microwave.com

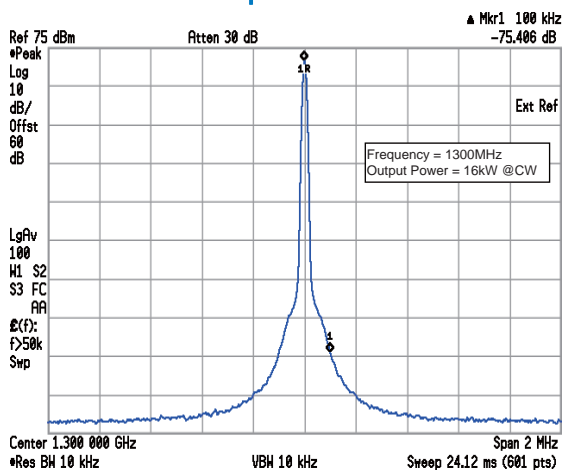
### Gain Flatness



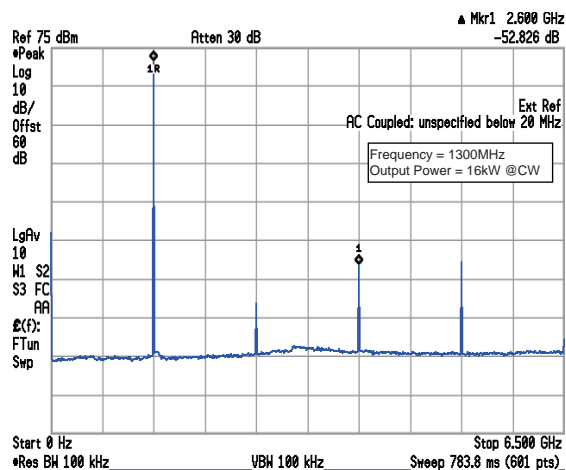
### Input / Output VSWR



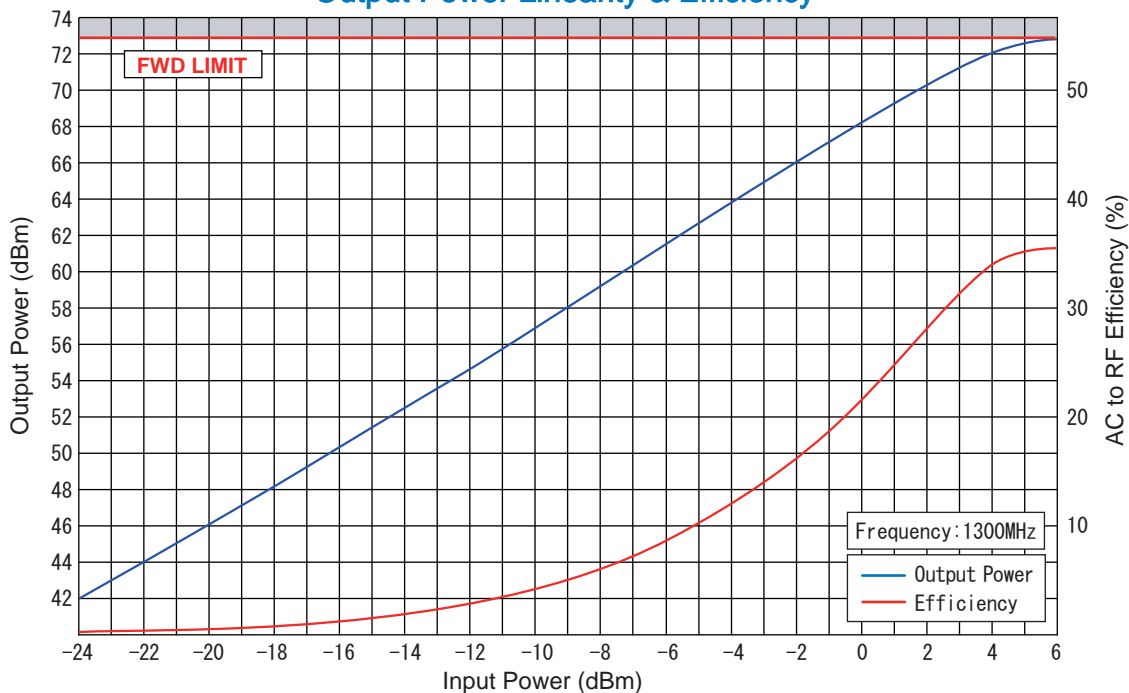
### Spurious



### Harmonics



### Output Power Linearity & Efficiency

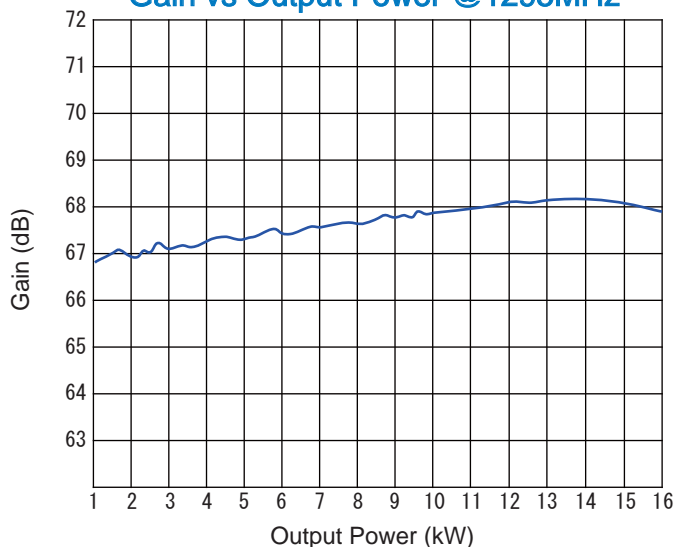


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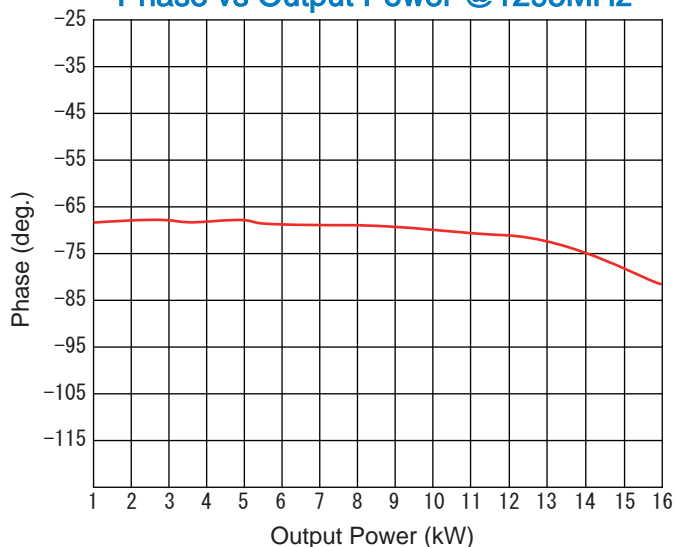
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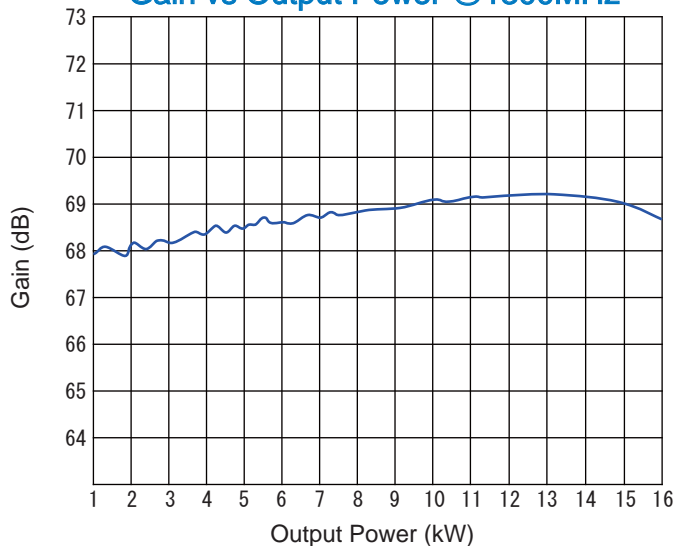
### Gain vs Output Power @1295MHz



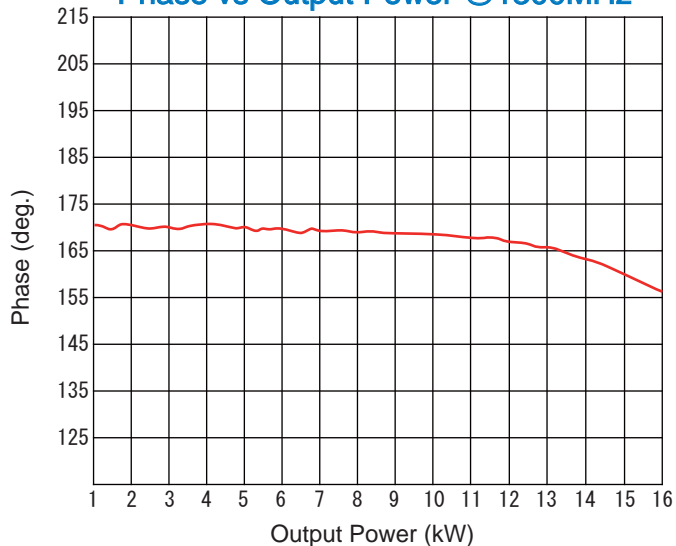
### Phase vs Output Power @1295MHz



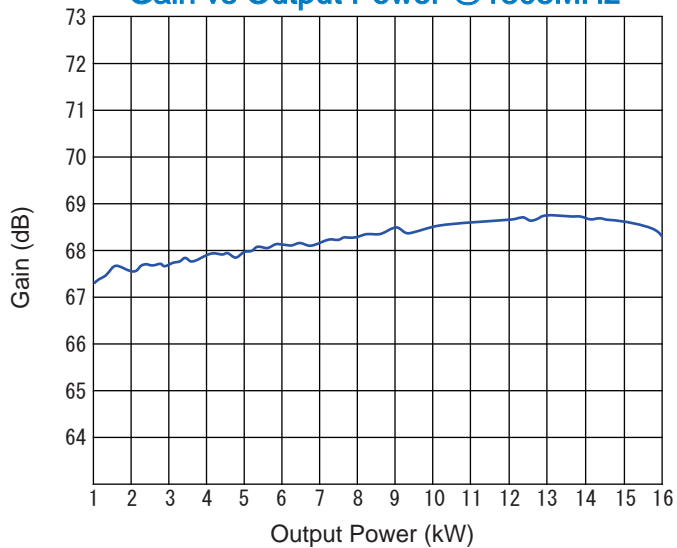
### Gain vs Output Power @1300MHz



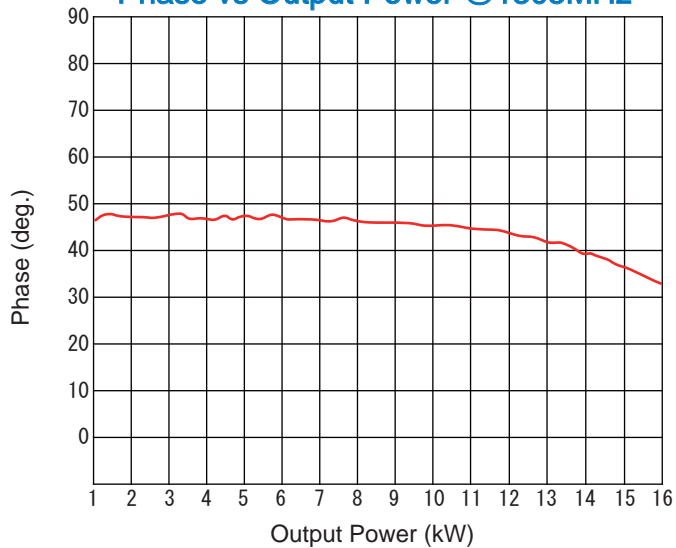
### Phase vs Output Power @1300MHz



### Gain vs Output Power @1305MHz



### Phase vs Output Power @1305MHz



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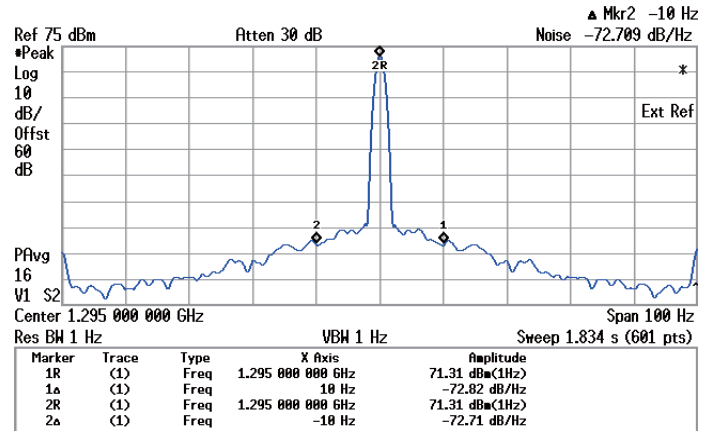
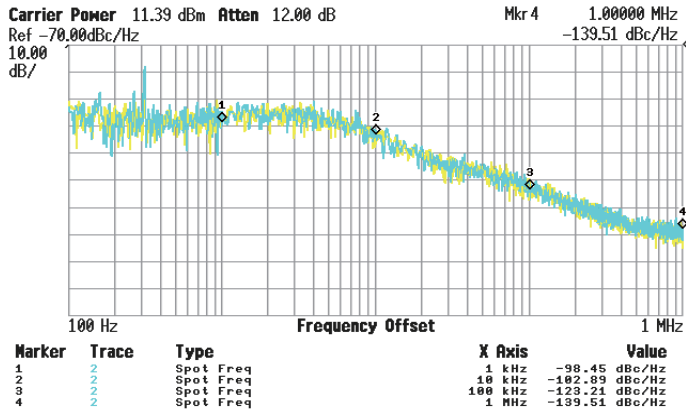
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## TYPICAL PERFORMANCE (Temp @+25°C)

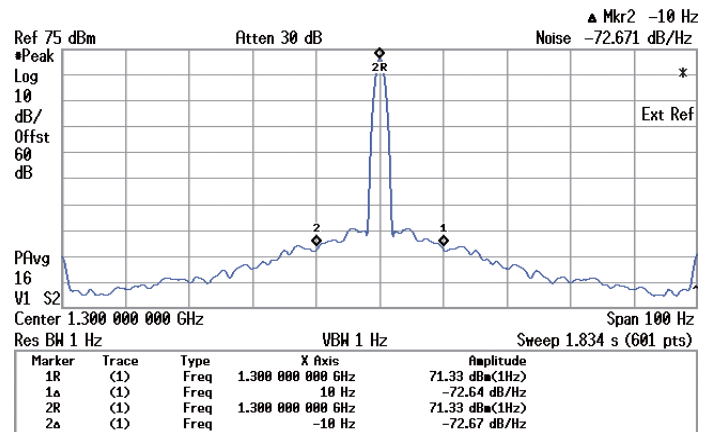
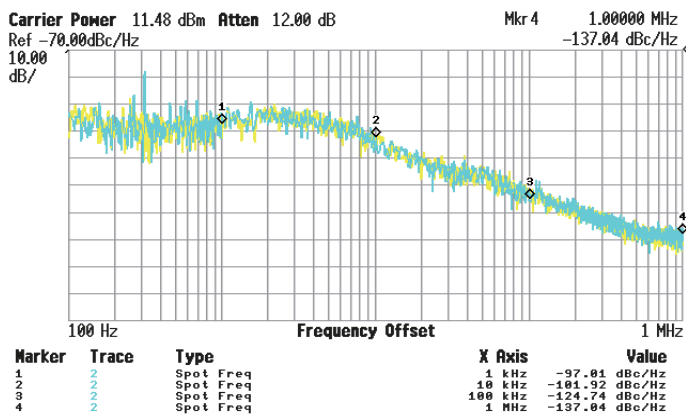
R&K-A1300BW10-6372R

### Phase Noise

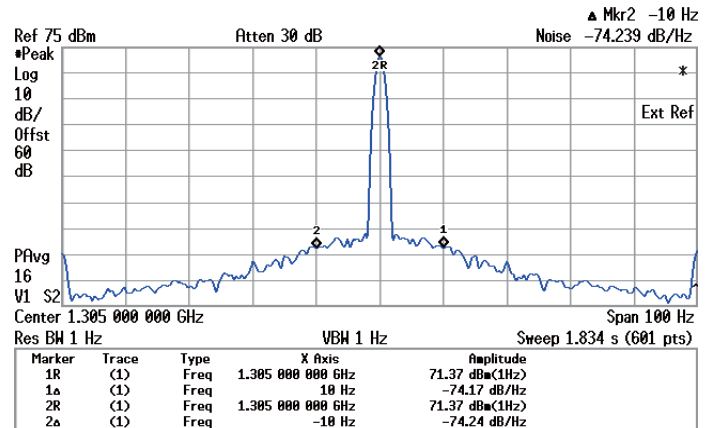
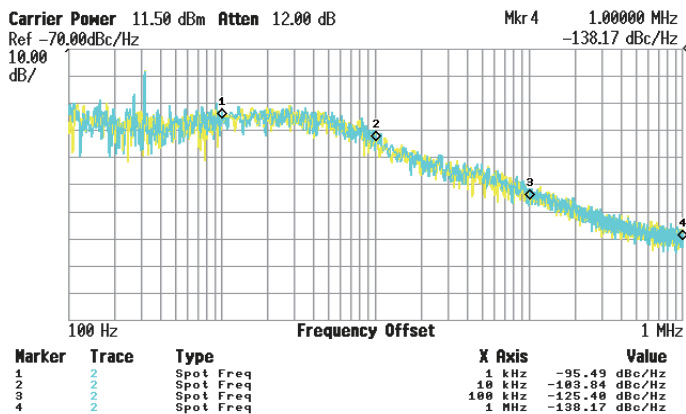
- Frequency = 1295MHz Output Power = 16kW @CW



- Frequency = 1300MHz Output Power = 16kW @CW



- Frequency = 1305MHz Output Power = 16kW @CW



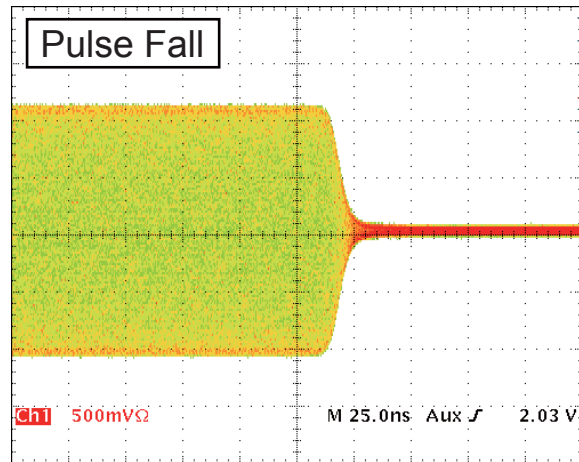
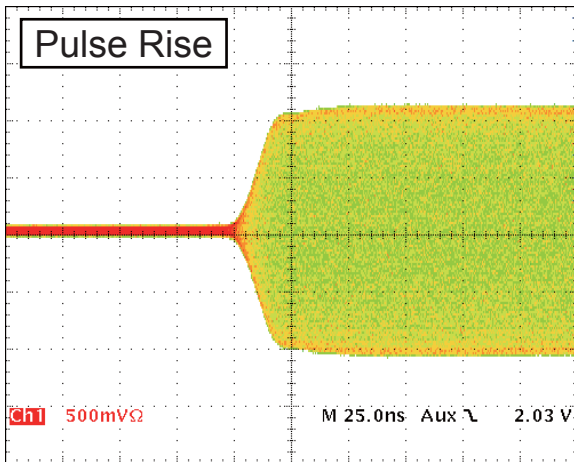
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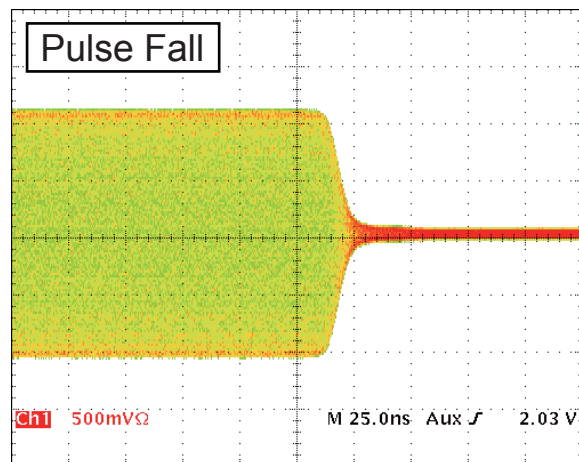
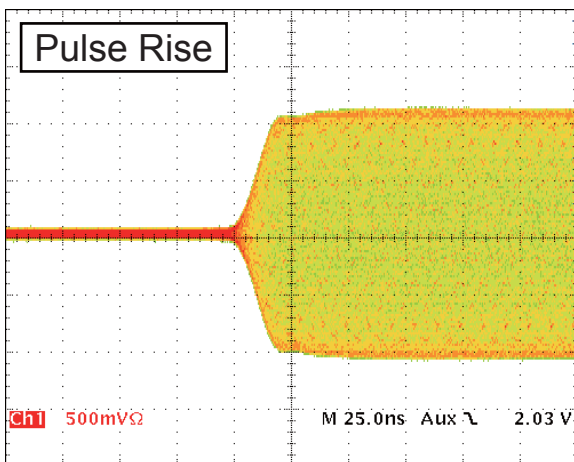
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## Pulse Characteristic

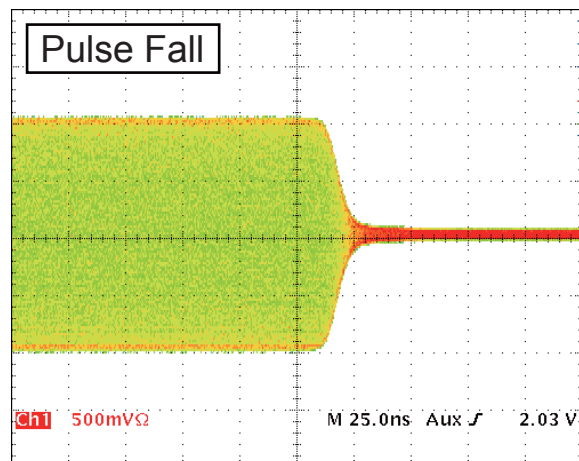
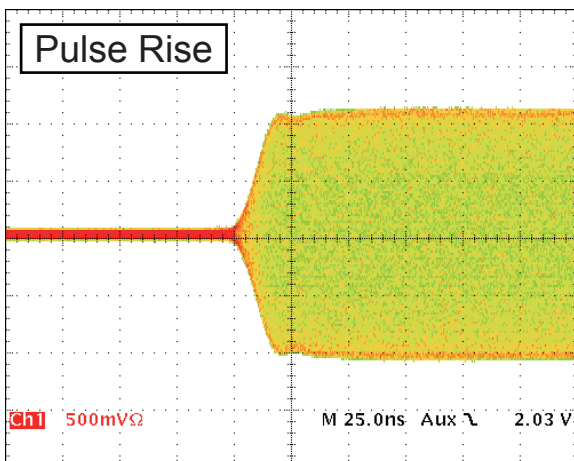
- Frequency = 1295MHz Output Power = 16kW Pulse Width = 100μs Duty = 10%



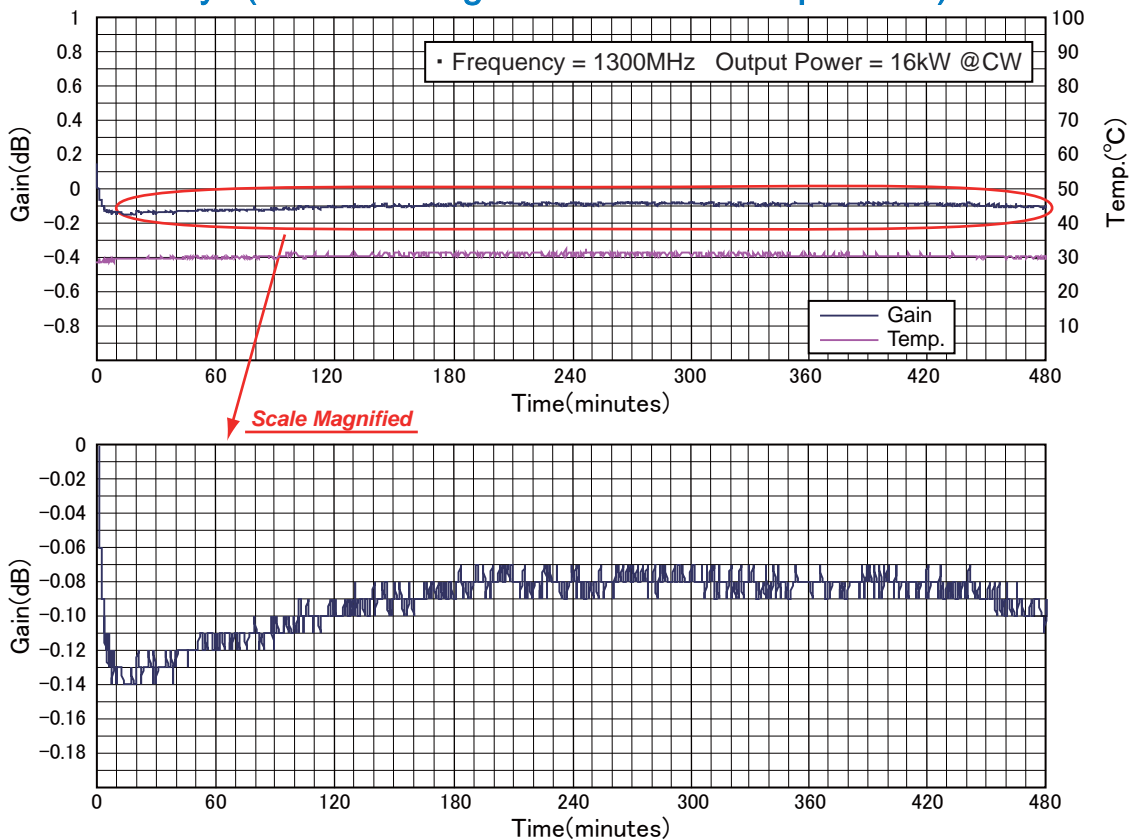
- Frequency = 1300MHz Output Power = 16kW Pulse Width = 100μs Duty = 10%



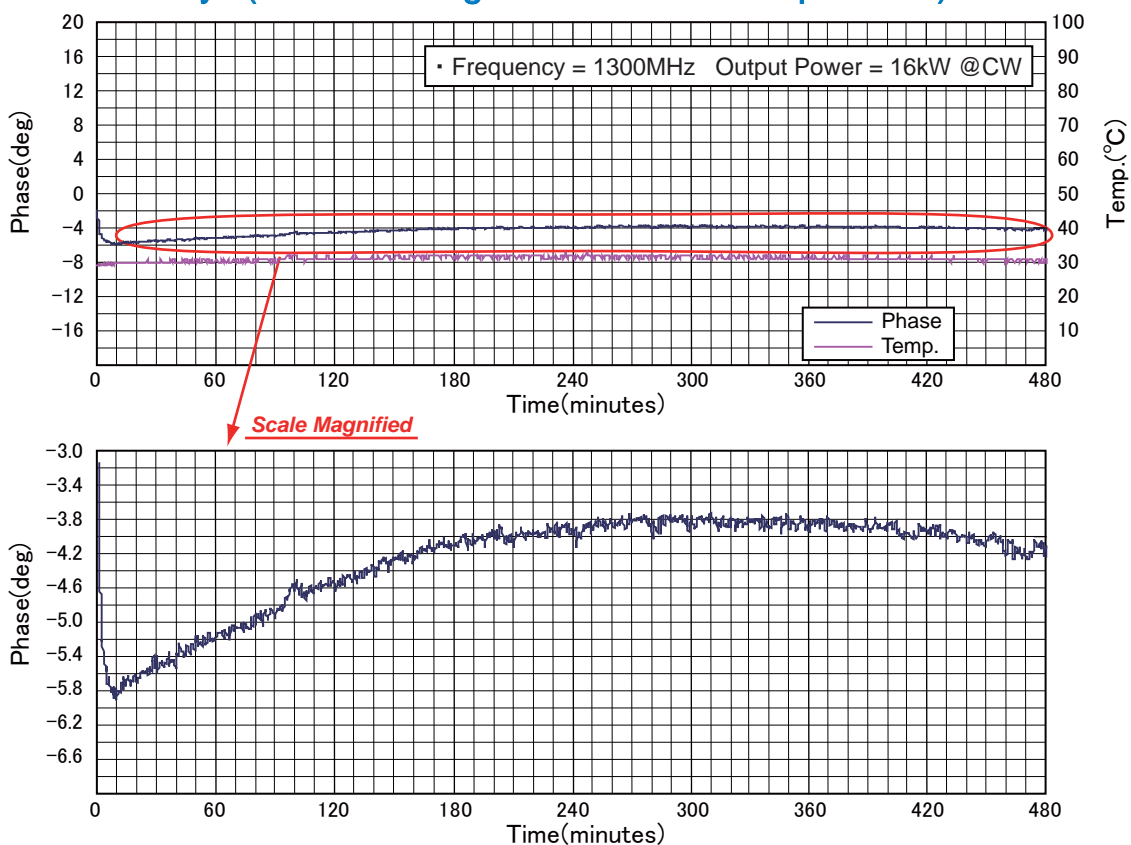
- Frequency = 1305MHz Output Power = 16kW Pulse Width = 100μs Duty = 10%



### ■ Power Stability (Free Running data at Room Temperature)



### ■ Phase Stability (Free Running data at Room Temperature)



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