

R&K-CA186BW3-7878R-LB



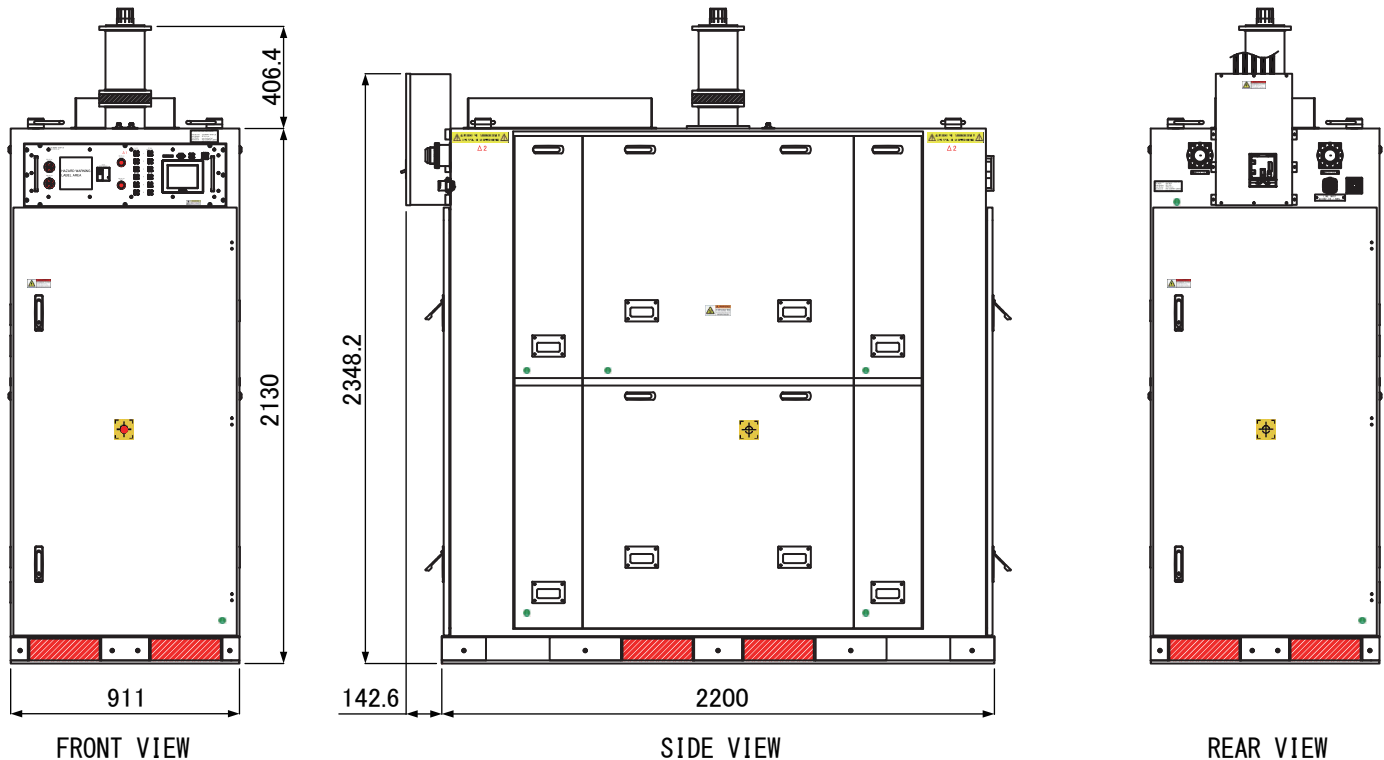
- All Solid-State Amplifier
- Frequency Range : 185.7MHz ± 1.5MHz
- Output Power (CW) : 60kW (min.) @1dB Comp.
- Efficiency : 54% @Po=60kW

APPLICATION

- Accelerator Application

OUTLINE DRAWING

※ IN MILLIMETERS



SPECIFICATIONS @ +25°C

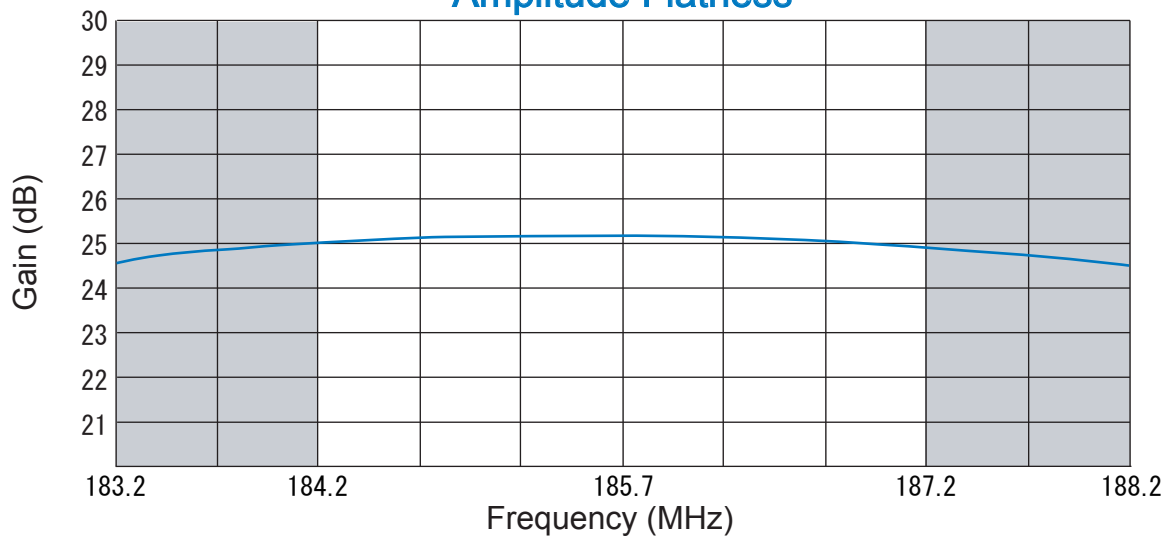
Frequency Range	: 185.7MHz ± 1.5MHz
Small Signal Gain	: +78.0dB (typ.)
Output Power (CW)	: 60kW (min.) @Psat.
Operation Mode	: Class AB
Amplitude Stability	: 0.1%(max.) @1sec, Po=60kW
Phase Stability	: 0.1° (max.) @1sec, Po=60kW
RF Stability	: ±0.5dB(max.) @8h, Po=60kW
Amplitude Flatness	: 5% (max.) @185.7MHz ± 200kHz
Phase Linearity	: 5° (max.) @185.7MHz ± 200kHz
Group Delay	: 300ns (max.)
Maximum RF Input Power	: +5dBm
Harmonics	: -30.0dBc (max.) @Po=60kW
Spurious	: -70.0dBc (max.) @Po=60kW
Noise Figure	: 10dB (max.)
Impedance	: 50 Ω
AC Supply Input	: AC480V / 3 φ, 5Wire, 60Hz AC120V / 1 φ, 2Wire, 60Hz
Consumption Power	: 120KVA (max.) @Po=60kW
Efficiency	: 54% @Po=60kW (@1dB Comp.)
Operating Temperature	: + 4°C to +45°C
Storage Temperature	: -15°C to +55°C
Connectors	: RF - IN N - FEMALE RF - OUT 6-1/8" EIA Flange
Size	: (W)911mm × (D)2200mm × (H)2536.4mm
Weight	: 2830kg (typ.)
Cooling	: Water Cooling
Protection Circuits	: Over Temperature Protection Output Over Reflection Power Protection AC Input Abnormality Detection Flow Rate Protection, etc. (All not listed)
Other Functions	: R&K Multi Monitoring System Modbus Control (Ethernet) With Output Circulator

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, the export of R&K products from Japan may be subject to an export license by the government of Japan, based on Japan's "Foreign Exchange and Foreign Trade Law".

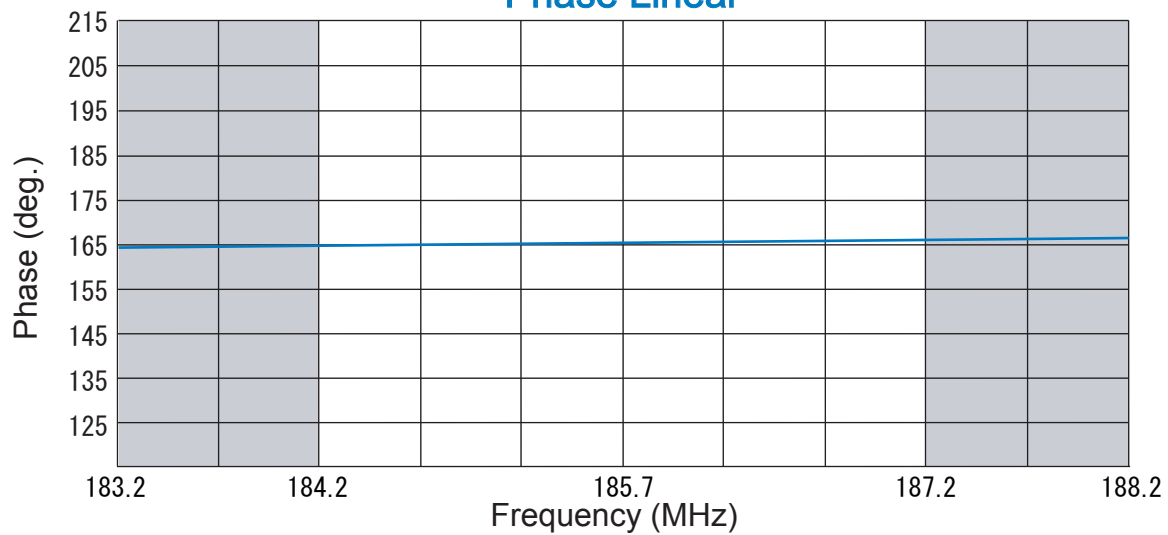
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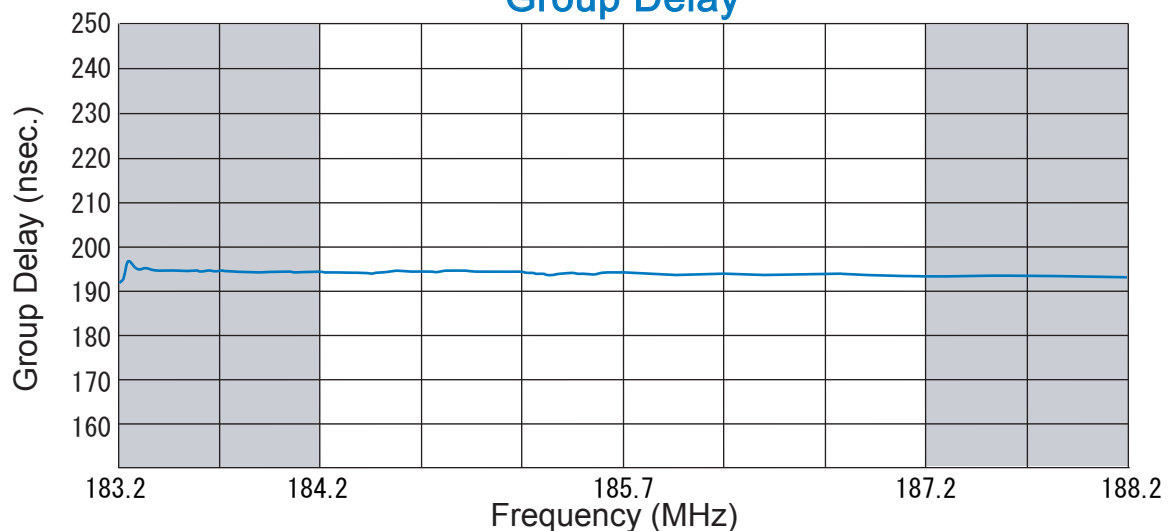
Amplitude Flatness



Phase Linear



Group Delay

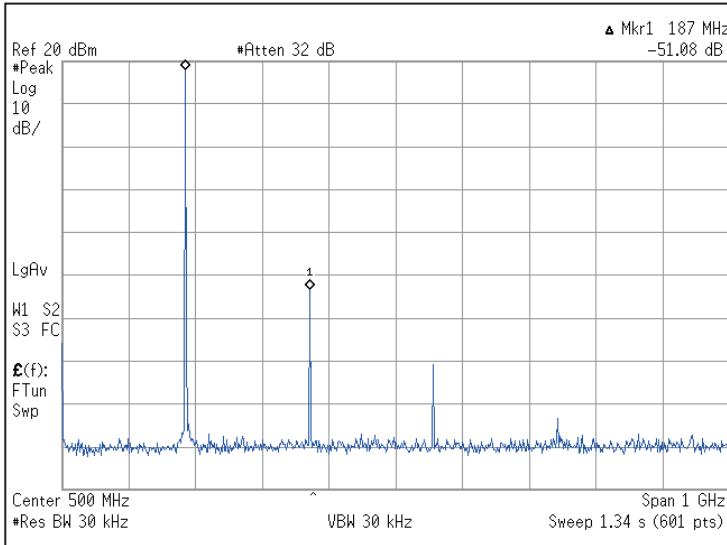


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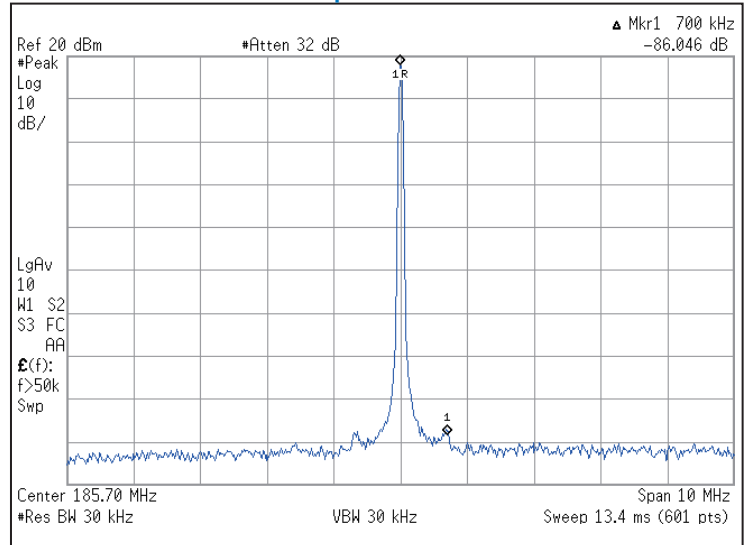
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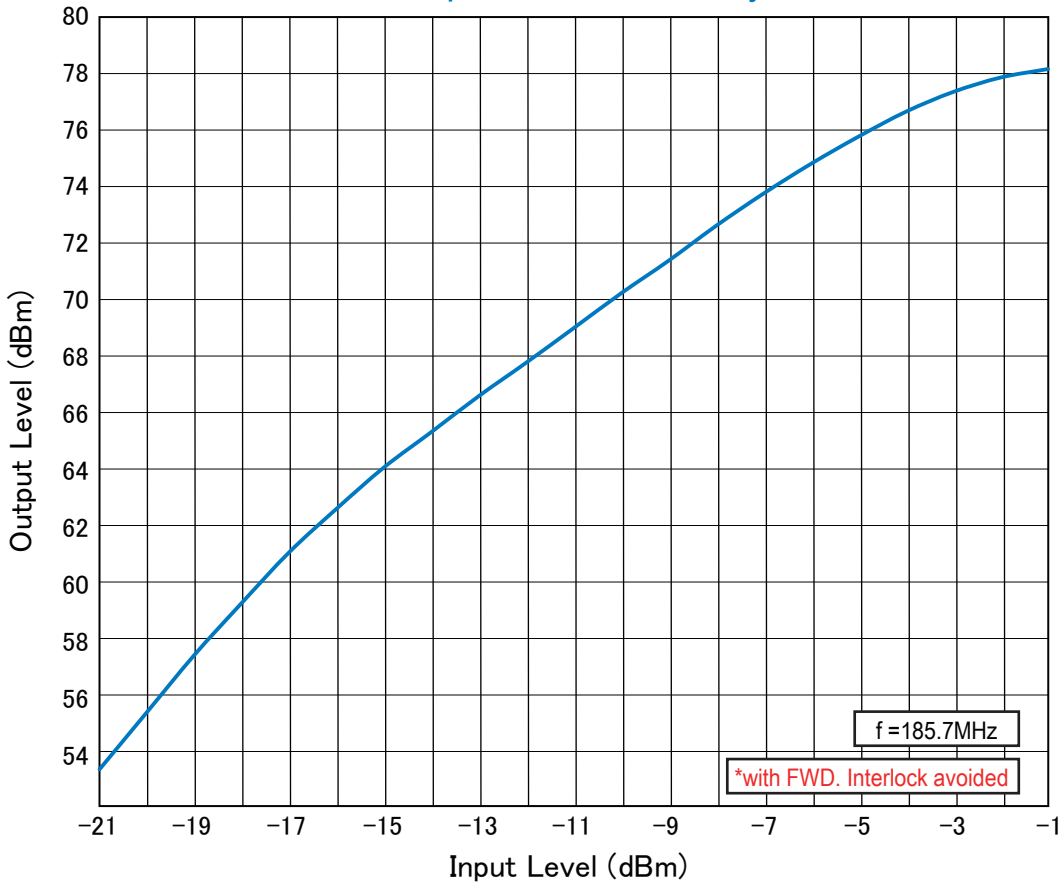
Harmonics



Spurious



Output Power Linearity



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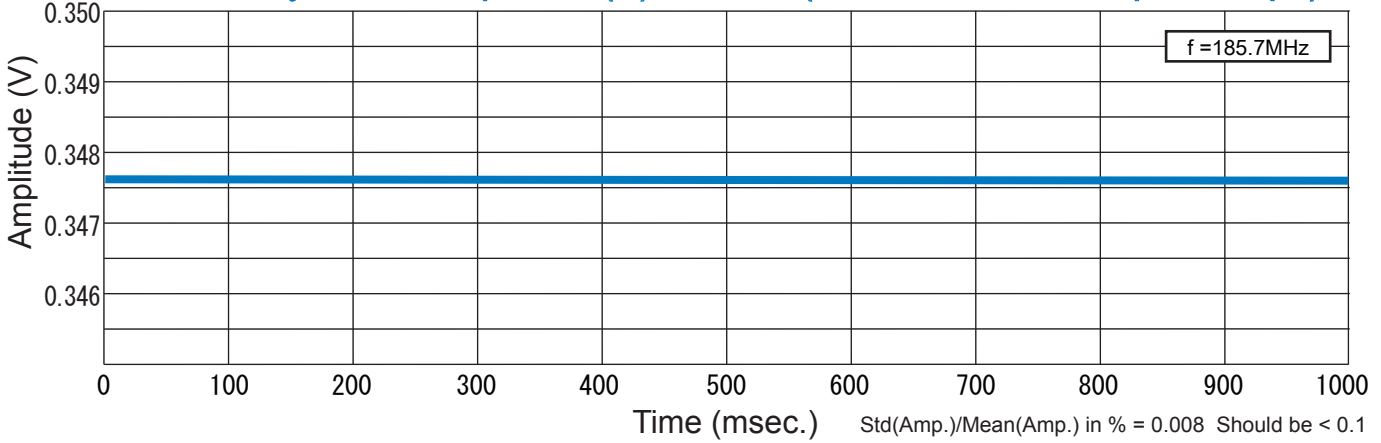
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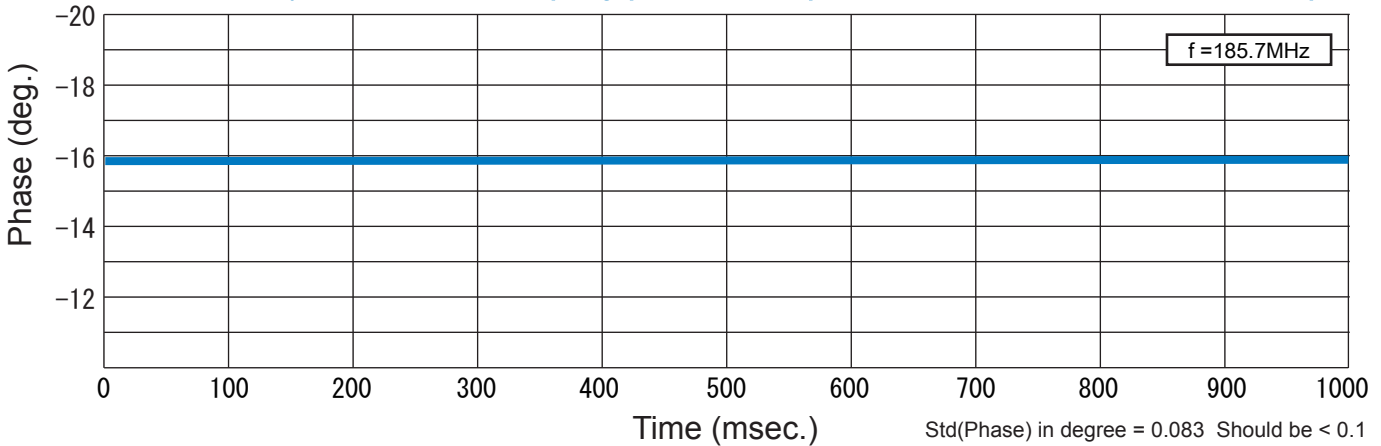
TYPICAL PERFORMANCE (Temp @+25°C)

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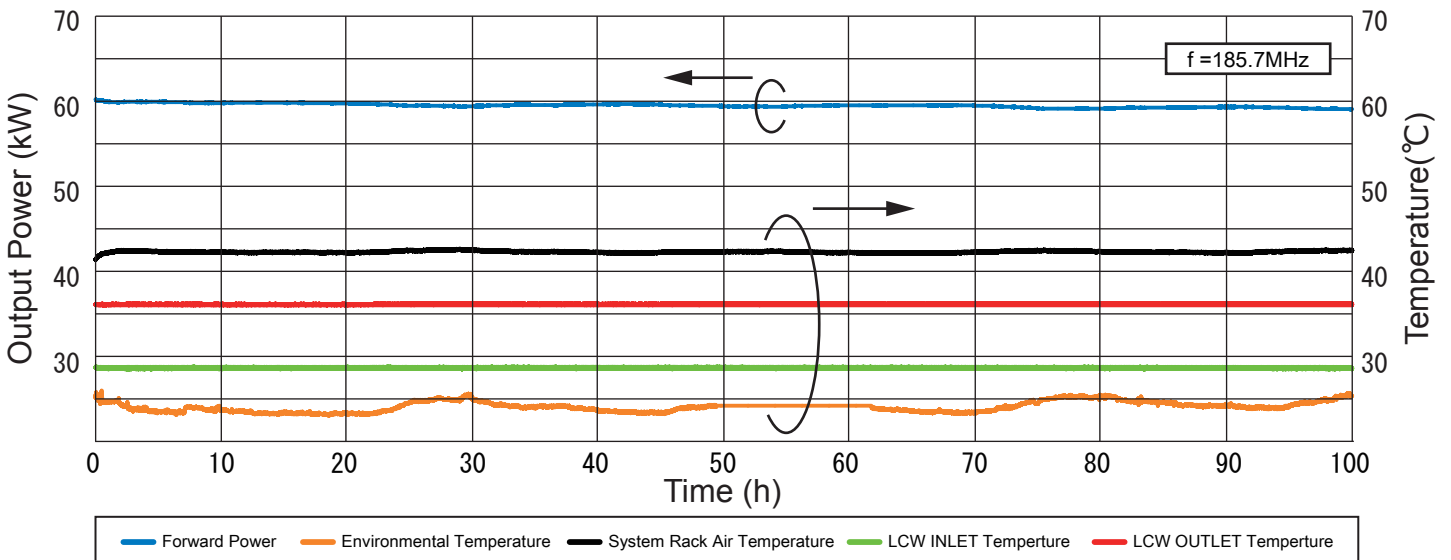
RF Stability 1sec Amplitude (V) vs Time (1s full scale, 25000point/40μs)



RF Stability 1sec Phase (deg.) vs Time (1s full scale, 25000point/40μs)



RF Stability @100h, +25°C



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