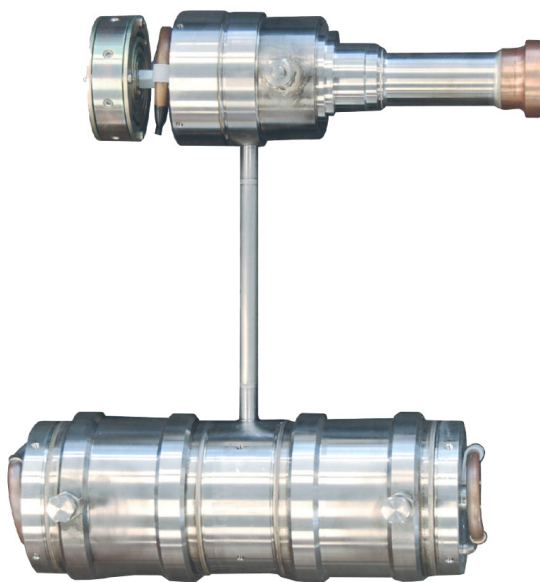


# SUNPOWER

## CryoTel® DS 30

32 W Cryocooler

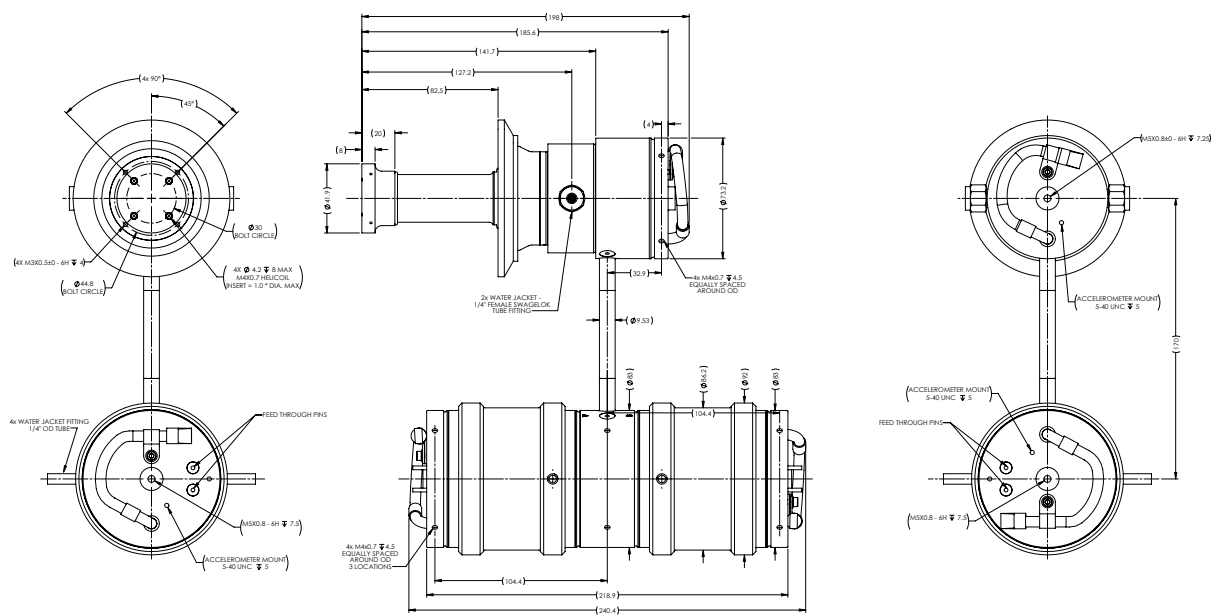


Nominal Heat Load @ 77 K (23° C reject)	32 W
Nominal Input	480 W
Cooler Mass	6.4 kg
Temperature Stability	± 0.1 K
Power Supply	DC 48V (19A)
Length	Cold Head: 232 mm Wave Generator: 244 mm
Diameter	Cold Head: 73 mm Wave Generator: 92 mm
Lowest Temperature	< 36 K
Orientation	any
AVC Compatible	yes
Operating Frequency	64 Hz
MTTF	> 200,000 hr

The CryoTel® DS30 cryocooler DS30 cryocooler offers efficient, reliable and compact cooling to the market in the temperature range of 35 to 250 Kelvin. The DS30 was optimized for applications in which SWAP (size, weight and power) and reliability are concerns. The DS30 consumes considerably less power than other cooling alternatives and requires no maintenance, making it ideal for strategic as well as industrial applications. The DS30 also delivers outstanding performance with a Mean Time to Failure of >200,000 hours.

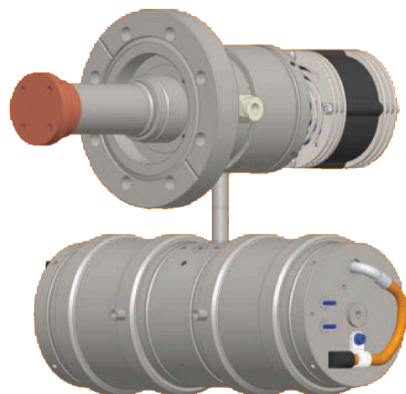
Unsurpassed  
efficiency,  
reliability and  
performance.

## Base DS 30 Cryocooler Dimensions



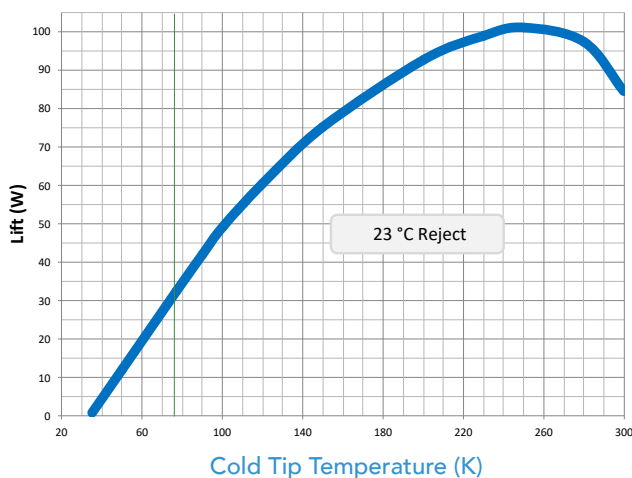
## Features of the DS30 include:

- Water-cooled cold head and wave generator for improved thermal efficiency
  - Active Vibration Control (AVC) technology optionally available with an active balancer on the cold head and wave generator piston control to minimize exported vibrations
  - Does not require an additional compressor or gas lines
  - Maintenance-free operation
  - Long life
  - Durable
- 



- Low input power needed compared to Gifford McMahon and mixed refrigerant technologies
- Three configurations available:
  - Inline: shown on front page
  - Parallel: shown on this page and front page
  - Cross: shown below

## Nominal Performance to 300K



*Data is subject to change.*