

# RS058 Integral Rotary Stirling Cryocooler

Match All kinds of  
Cooled IR Detectors



## Description

RS058 is one of the integral rotary stirling cryocooler series developed by Global Sensor Technology (GST). It provides a miniature closed cycle cooling system to ensure a cryogenic working environment for the normal operation of cooled infrared detectors. Its motor windings are separated from the working gas to prevent contamination. High wear-resisting coating and clean room assembly are applied to prolong the lifetime and high reliability.

## Principle

- Adopt key technologies such as high-efficiency brushless DC motor drive, high-efficiency wear-resistant coating, and high-precision miniature bearing support

## Features

- Compact structure, small size, light weight, adapt to various harsh environments

## Application

- Widely used in various electro-optical systems such as handheld imagers, pods, turrets, security monitoring, ADAS etc.



## Specifications

|                             |                                     |
|-----------------------------|-------------------------------------|
| Model                       | RS058                               |
| Type                        | Integral Rotary Stirling Cryocooler |
| MTTF                        | $\geq 10000$ hrs                    |
| Maximum Size (mm)           | 116x58.5x71                         |
| Weight                      | $\leq 430$ g                        |
| Cooling Power               | (@77K@20°C) $\geq 550$ mW           |
| Operating Temperature       | -45°C~+71°C                         |
| Storage Temperature         | -55°C~+85°C                         |
| Environmental Specification | GJB150A-2009                        |
| Input Voltage               | 18-28VDC/12-16VDC                   |
| Max Power Consumption       | $\leq 14$ W                         |
| Steady Power Consumption    | $\leq 5.5$ W(220mW@77K@20°C)        |
| Cooling Time                | $\leq 5$ min(250J@77K@20°C)         |
| Cold Finger Size            | $\Phi 8$ mm                         |
| Electronics                 | Built-in                            |
| Integration Method          | IDCCA                               |

Specifications are subject to change without prior notice.

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