

Technote #024

Air purge and air cooling requirements

The limiting air flow restriction for all of the IRt/c models and available airpurge jackets is the air fitting supplied with the unit. Accordingly, all IRt/c's with built-in air purge, and the micro IRt/c or ACE airpurge jacket all have essentially the same pressure vs. air flow characteristics, and the air flow chart applies to all. However, the air consumption requirements for purging or cooling for each are somewhat different due to size and operation variables. Refer to the table for specific model requirements for minimum pressure for purging, or for cooling in elevated ambient conditions. Pressure for cooling can be increased when ambient temperatures increase, yet be aware of the possibility that the airflow can cool your target if the sensor is positioned at close distance.

Temperature: Deg C = (Deg F - 32) x (5/9)
Pressure: kPa = psig / 0.15
Flow: L/min = SCFM x 28.3

Model	Air Purge pressure
IRt/c.3X, IRt/c.3SV, micro IRt/c with airpurge	> 0.1 psig
ACE with airpurge	> 0.3 psig
IRt/c.5, IRt/c.10, IRt/c.10A, IRt/c.20A	> 5 psig

Air flow chart

