Rotary Screw Compressors
UP5 Series 11-37 kW

performance
that pays
Boost Your Profitability

Boosting your company’s profits was the main goal that Ingersoll-Rand had in mind when designing the revolutionary UP-Series line of integrated rotary screw air solutions.

So how can a compressed air system help you increase profitability? The answer is really pretty simple, by ensuring that you achieve highest productivity in your shop while minimizing the total costs of ownership to the absolute lowest levels.

The UP-Series is more than an integrated air system, it’s a complete air solution designed to maximize the key drivers of profitability in today’s business:

- Ultimate Reliability
- Shop Productivity
- Flexibility Of Operation
- Energy Efficiency & Savings

Welcome to Ingersoll-Rand’s UP-Series Rotary Air Solutions, a higher standard of performance.

Choosing the right air solution has never been easier...
Rotary Screw Compressors
UP5 Series 11-37 kW

Ultimate Reliability

• Maximum Uptime
  Ingersoll-Rand is so confident in the performance of the UP-Series, that we’ve extended the warranty to 5 years.

• Fewer Connections
  Smart integration eliminates leaks and pressure drops maximizing reliability.

Ultimate Efficiency

• More Air For Your Money
  Industry leading performance delivers more air for less horsepower, saving thousands of Euros per year on energy.

• Smart, Energy Efficient Controls
  Eliminates wasteful unloaded running by unloading rapidly and by cycling the compressor on/off when not needed.

• Energy Efficiency
  High efficiency EFF1 IP55 enclosure main motor driving both compressor and cooling blower.

Ultimate Flexibility

• Compact Footprint Design
  Receiver mounting frees up valuable floor space and reduces install costs.

• Installation Close To Point-of-use
  Whisper quiet operation allows for installation closer to point-of-use, reducing costs and ensuring a better & safer work environment.

Ultimate Productivity

• Closely Maintained Pressure
  Reduced discharge pressure and avoiding excessive pressure bands, increases downstream tool and equipment life.
Innovation

• **High Efficiency Integrated Compression Module**
  To provide maximum performance, efficiency and ease of service, the airend, interconnecting piping and separation system have all been integrated into one simple design. Integration of the compression module eliminates leaks and pressure losses to increase efficiency and performance.

Service and maintenance are made extremely simple through spin-on filtration and separator cartridges.

Real world advantages

• **Whisper Quiet Operation**
  Oversized, high efficiency cooling air blower. Provides sound levels as low as 67 dBA.

• **Dual Control Operation**
  Reliable and effective load/no-load control with automatic stop and restart facility for maximum flexibility.

• **Simple Diagnostics**
  Visual indication of operating status and hours run, for ease of operation and reduced downtime.

• **Poly-V Belt Drive**
  Premium drive system applies patented automatic tensioning to eliminate belt stretch and increase air output.

• **Advanced Cooling**
  A package prefilter, efficient combination aftercooler with access to both sides for easy cleaning and top discharge to simplify ducting.

• **Generous Serviceability**
  All key maintenance components have been grouped to provide ease of serviceability.
High Efficiency Filter Pack

Clean air to drive productivity

- Deep bed general purpose filtration to deliver best performance, reduce pressure losses and extend operating life.
- Particulate removal to industry leading 1 micron.
- Longer element life, lower pressure drop.
- Better air quality delivered to tools and equipment results in longer life, or ready for further treatment to meet specific requirements

Energy Savings Refrigerated Air Dryer

Dry air to drive productivity

- High efficiency direct expansion refrigerated dryer – automatically starts with the compressor and operates continually. This operating cycle ensures immediate drying, reactive to the compressor loads. The dryer operates until the compressor unit is shut down.
- Simple coiled tube-in-tube heat exchanger is selected at this size of unit to achieve optimum performance, with low losses, high thermal efficiency and long service life.
- Highly efficient centrifugal moisture separator with timed solenoid drain valve to permanently discharge condensate.
- Eliminates corrosion of piping, a cause of premature wear of tools and seals.
Integral
treatment

Smart Integration for 11-22 kW
*Advanced packaging to drive reliability & uptime*

- "Dry" Air Receiver mounted compact package lowers the cost of installation (optional floor mount also available).
- Integral air cooling with separate flow paths to ensure cooling is achieving 100% of time that compressor is running.
- Easy access to all compressor and air treatment components, promoting serviceability.
- Package pre-filter for longer component life and reduced maintenance cost.
- Simplified piping – elimination of potential leaks.
- Single point condensate drain system instead of separate points – reduces installation cost.
- Segregated cooling compartment provides advanced cooling flow management, and reduces noise level.

**Practical Options and Kits**

*Customize your system*

- Floor mounted
- Compressor package without air treatment equipment
- Weather resistant enclosure
- PORO (power outage restart option) to safely restore machine following power interruption
- Frost protection (not available for units with refrigerant dryer)
- Upper range modulation control
- Sequence controllers
- PacE system pressure regulators

Choosing the right air solution has never been easier...
Modular Cross Flow Heat Exchanger
Leading technology driving efficiency

At the heart of the dryer lies the specially designed cross flow heat exchanger module incorporating air-to-air and air-to-refrigerant heat exchangers, a high efficiency stainless steel de-mister condensate separator all in one compact unit.

Pre-cooling reduces the refrigeration load by as much as 60%. Air is further cooled through refrigerant heat exchange. Moisture is removed by the de-mister, close-coupled to the evaporator.

Cross flow heat exchanger incurs minimum air pressure losses while ensuring efficient water removal.

Energy Savings
Refrigerated Air Dryer
Dry air to drive productivity

- Direct expansion, refrigeration dryer simply and reliably dries the compressed air whenever the machine is loaded.
- Composite welded aluminium heat exchanger for low losses, high thermal efficiency and long service life.
- Solenoid drain valve and high efficiency moisture separator to permanently discharge condensate.
- Eliminates corrosion of piping, a cause of premature wear of tools and seals.
Integral treatment

Smart Integration for 22, 30 & 37 kW
*Advanced packaging to drive reliability & uptime*

- Floor mounted units only (a wide range of free standing receivers are optionally available)
- Integrally cooled dryer module with separate cooling paths to achieve best overall efficiency and ensure cooling is achieving 100% of time that compressor is running.
- Spacious design simplifying access and promoting serviceability.
- Package pre-filter for longer cooler life and reduced maintenance costs.
- Simplified piping – elimination of potential leaks.
- Single point condensate drain system.
- Optional supply without dryer installation.

Choosing the right air solution has never been easier...
Leading Warranty As Standard

• 5 Year Warranty Protection
  All Ingersoll-Rand UP-Series compressors come standard with a one year package warranty and a 4-year extended parts warranty coverage.

AirCare Coverage
  Ensure the highest level of satisfaction with the highly acclaimed, bumper-to-bumper, extended life care programme. Ask your authorized IR representative for more details.

Ultra-Plus Coolant
  All units come standard with Ingersoll-Rand’s Ultra-Plus advanced synthetic coolant:
  • 9,000 hour extended coolant life
  • Simple condensate separation
  • High level of biodegradability

Ease Of Service
  Ingersoll-Rand designed the UP-Series package with ease of service in mind. Spin-on filter and separator element along with 3/6/9,000 hour / annual service intervals make life simple. Your IR Air Solutions provider will recommend the most cost effective maintenance program to keep your investment operating trouble free for years.

Intellisys Control Option
  Probably the best known name in compressor control systems, the optional intellisys control offers precise pressure control, energy saving functions and advanced asset protection.

Parts Kits Make It Simple
  Simple to order parts kits make it easy to ensure that you have the right parts on hand when you need them. Ingersoll-Rand’s reputation for compressor parts availability and reliability is second to none.
Industry Leading Performance

### Specifications

<table>
<thead>
<tr>
<th>Model No</th>
<th>kW</th>
<th>HP</th>
<th>m³/min†† (cfm) without dryer</th>
<th>m³/min†† (cfm) with dryer</th>
<th>Bar at discharge without dryer</th>
<th>Bar at discharge with dryer</th>
<th>dB(A)†</th>
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<tbody>
<tr>
<td><strong>UP5</strong></td>
<td>11</td>
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<td>1.84 65 7.5 7.15* 68+3</td>
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<td>11 2132 920 1887 801 903 750 litre 15 2132 920 1887 801 903 18 2132 920 1887 801 903 22 2132 920 1887 801 903 22E 1712 1379 1344 – 1106 30 1712 1379 1344 – 1142 37 1712 1379 1344 – 1178</td>
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* Maximum discharge pressure for package which includes moisture separator, refrigerated dryer, installation, and condensate drains.

† Maximum discharge pressure for package which includes moisture separator, refrigerated dryer and installation with GP filter. Filtration efficiency to 1 micron for solid particles, liquids 0.5 mg/m³ W at 21°C, and condensate drains.

†† Capacity quoted tested in accordance with ISO 1217 annex C 1996 (CAGI-pneurop PN2CPT2)

‡‡ Dimensions same for receiver mounted package either with or without dryer.

‡ Sound levels per ISO 2151; 2004 annex C

N/A indicates not available

### Dimensions & Weights

<table>
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<tr>
<th>Mounting</th>
<th>kW</th>
<th>L</th>
<th>W</th>
<th>H</th>
<th>Package weight (kg) without dryer</th>
<th>With dryer</th>
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<td><strong>750 litre</strong></td>
<td>15</td>
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