



BLUE STAR

Long Distance Piping
Packaged Airconditioners

Smart cooling solutions for modern high-rises.





Effective Cooling, Elegantly

Modern high-rises and towering skyscrapers are the features of our skyline today. And so are the eyesores of numerous AC systems jutting out under every window. Not any more with Blue Star's innovative solution to meet the cooling needs of modern high-rises without detracting from their aesthetic charm. Introducing the Long Distance Piping Packaged ACs (LDP).

Designed to meet the specific needs of glass facade high-rises, IT buildings, malls and multiplexes, the LDP Packaged ACs come with extended piping, allowing the condensers to be placed far from the indoor units. This facilitates easy installation on the ground or on the terrace, and offers more flexibility to design the AC system to suit your specific building architecture. Just what you would expect from the leader in commercial airconditioning solutions for over 6 decades now.

Extended Reach for Exceptional Flexibility

Blue Star's LDP ACs are floor-mounted scroll compressor-driven packaged units. They are designed to handle piping distances of up to 100 metres between condensers and evaporating units, while the vertical run can be as long as 50 metres (as compared to just 7 metres in standard packaged units). This makes the LDP Packaged ACs ideal for installation on high-rise buildings with glass facades.

Undeniable Advantages



Easy installation in glass-fronted high-rises

Longer piping distances allow the air-cooled condensers to be placed on the terrace or ground. The plant rooms can now be located wherever architecturally feasible.



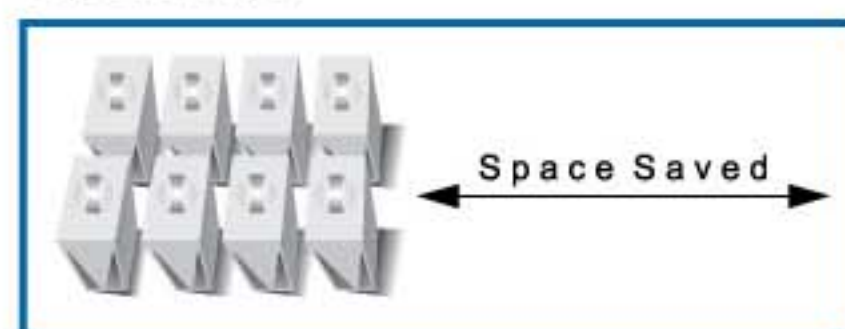
Space-saving upflow option

The condenser units allow upflow and sideflow air throw options, allowing for a space-saving layout.

Side Discharge



Top Discharge



Customised ducting design

The LDP units are flexible enough to allow ducting at various duct static requirements, resulting in customised cooling layouts.



Superior cost-efficiency

As compared to chilled water systems with complex accessories, VFDs and AHUs, the LDP Packaged AC systems are significantly more cost-effective.



Quick project completion

Blue Star's LDP cooling units are completely factory assembled, tested with ready-to-install indoor and outdoor units that ensure quick installation. You can also choose to commission these units on a floor-by-floor basis, as occupancy takes place.

Technical Highlights



Scroll compressor

The 100% volumetric efficiency scroll compressors ensure maximum delivered cooling capacity despite the long piping design and the friction losses of the circuit. The twin circuit refrigeration system handles part load efficiently and delivers additional power savings over and above the 10% a scroll promises over conventional reciprocating packaged units.



Indoor liquid receiver

Since these units require an additional charge of liquid refrigerant proportional to the pipe length, an indoor liquid receiver is located in the IDU to ensure entry of saturated liquid into the expansion device and eliminate flash gas formation due to the longer piping.



Online accumulator

Each compressor circuit is protected by an online accumulator which prevents the entry of the liquid into the compressor and prevents dilution of the lubrication oil.



High-efficiency oil separator

Each compressor circuit has an independent high-efficiency oil recovery system with a special lubrication oil separator. This wringles out all the oil carried away with the hot discharge gas and returns to the compressor, ensuring safe levels of lubrication oil inside the compressor.



Safety devices

The LDP cooling system is designed for durability and long life. High-quality safety pressure switches for Low and High Pressures protect the compressor from system failures. Special protection devices (SPPR) ensure long compressor life by protecting it against reverse polarity, failure of one phase, unbalanced voltage between any two phases etc. The system also comes with in-built thermal protection and high current protection devices.



Technical Specifications for Long Distance Piping Packaged Airconditioners

Model	Units	DPAL-1321S	DPAL-2642S
Nominal Cooling Capacity	k.cal/hr	33,000	66,000
	TR	11	22
Power Supply		415V – 3Ph – 50Hz	
INDOOR UNIT			
Dimension (W x D x H)	mm	1160 x 660 x 1700	1500 x 930 x 2000
Cooling Coil		Internally grooved copper tubing with slit fins	
Blower Fan		Centrifugal	
Nominal Air Flow	CMH	7480	14960
Fan Motor	Watts	1500	3000
Compressor			
Type		Hermetically sealed scroll	
Quantity		1	2
Control Panel		In-built	
Net Wt/Shifting Wt	kg	300/320	580/600
OUTDOOR UNIT (Option 1)		Standard Model - Top Discharge CDT - 1321S	
Dimension (W x D x H)	mm	1170 x 850 x 1065	1170 x 850 x 1065
Quantity		1	2
Condenser Coil		Internally grooved with slit fins, anti-corrosion blue fins	
Nominal Air Flow	CMH	7500	7500
Fan Motor	Watts	750	750
Net Wt/Shifting Wt	kg	110/125	110/125
OUTDOOR UNIT (Option 2)		Optional Model - Side Discharge CDF - 1321S	
Dimension (W x D x H)	mm	1435 x 620 x 947	1435 x 620 x 947
Quantity		1	2
Condenser Coil		Internally grooved with slit fins, anti-corrosion blue fins	
Nominal Air Flow	CMH	7500	7500
Fan Motor	Watts	2 x 250	2 x 250
Net Wt/ Shifting Wt	kg	130/145	130/145

Other standard parts include oil separator, accumulator, liquid receiver and crank case heater.

* Specifications are subject to change based on design needs.



For more information, please contact **BLUE STAR LIMITED: Ahmedabad:** 2nd Floor, Shivallik II, Near Shivranjani Cross Roads, 132 Feet Ring Road, Satellite, Ahmedabad 380015. Tel: (079) 40224000 **Bangalore:** Ozone Manay Technology Park, SY.No 56/18 & 55/9, Hongasandra Village, Begur Hobli, Garvebhavipalya, Bangalore 560068. Tel: (080) 41854000 **Bhopal:** Star Arcade, 2nd Floor, Plot No. 165A & 166, Zone 1, Maharana Pratap Nagar, Bhopal 462011. Tel: (0755) 5273378 **Bhubaneswar:** 3A, Satya Nagar, 2nd Floor, Bhubaneswar 751007. Tel: (0674) 2508303 **Chandigarh:** SCO 1, Madhya Marg, Sector 26, Chandigarh 160019. Tel: (0172) 502 4000 **Chennai:** No.104, Old No.46, Garuda Buildings, Cathedral Road, Chennai 600086. Tel: (044) 42444000 **Goa:** 1st Floor, Buddhaseth Apts, Tonca, Caranzalem, Goa 403002. Tel: (0832) 2461671 **Gurgaon:** Block 2-A, DLF Corporate Park, DLF Qutab Enclave, Phase-III, Mehrauli-Gurgaon Rd, Gurgaon 122002. Tel: (0124) 4094000 **Guwahati:** New Star Freeze Building, 2nd Floor, Opp Kunjalata Bibah Bhawan, G.S. Road, Guwahati 781005. Tel: (0361) 2340619/20 **Jaipur:** A-19, 1st Floor, Main Sahakar Path, Near Sahakar Bhawan, Jaipur 302001. Tel: (0141) 2744033/35 **Kochi:** XXXIX/4080, Meenaxi Mandiram, M.G. Road, Kochi 682016. Tel: (0484) 2361282 **Kolkata:** 7, Hare Street, Kolkata 700001. Tel: (033) 22134000 **Lucknow:** B-140, Nirala Nagar, Lucknow 226020. Tel: (0522) 4034000 **Mumbai:** Blue Star House, 9-A, Ghatkopar Link Road, Saki Naka, Mumbai 400072. Tel: (022) 66684000 **Nagpur:** 219, Bajaj Nagar, 1st Floor, South Ambazari Road, Nagpur 440010. Tel: (0712) 2249000 **Pune:** 201/A, Nityanand Complex, 1st Floor, 247/A, Bund Garden Road, Pune 411011. Tel: (020) 41044000 **Secunderabad:** 207, Sikh Road, Bantia Estate, Secunderabad 500003. Tel: (040) 44004000 **Thiruvananthapuram:** T.C.IX/1490, Chandrika, Sasthamangalam, Thiruvananthapuram 695010. Tel: (0471) 2720025/65 **Vadodara:** Ramakrishna Chambers, 7th Floor, Productivity Road, Alkapuri, Vadodara 390007. Tel: (0265) 2330334 / 6614100 **Visakhapatnam:** 47-12-6/7, 2nd Floor, Amaravathi Complex, Dwarakanagar, Visakhapatnam 530 016. Tel: (0891) 2748405. Visit us at www.bluestarindia.com or email: coolingsolutions@bluestarindia.com