

Glacier Bay
Technology





What Sets **ClimaCab** Apart

1. Longest Run Times... More BTU's/Hour
2. Data Collection/ Data Analysis
3. Start Assist TM Jump Starts
4. Digitally Controlled A/C and Heat
5. Simple Installation w/ no Storage Loss
6. Performance Guarantees
7. Reliability
8. Warranty



ClimaCab Means No Trade-offs

Fleet Operator

Diesel APU

- High fuel & maintenance costs (\$3,000 per year)

Underpowered Electric APU's

- Lower initial cost, high hidden costs, and operating costs.



- Lower overall costs and a 13 month payback



Truck Driver

- Unlimited air conditioning and unlimited power for accessories

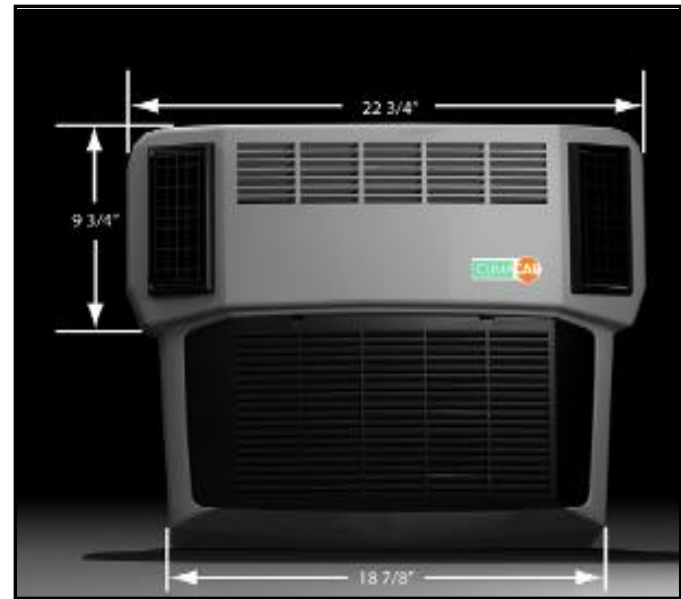
- Limited climate control, or living with discomfort

- 10-15 hours of 70° climate certainty, anywhere



Evaporator Module

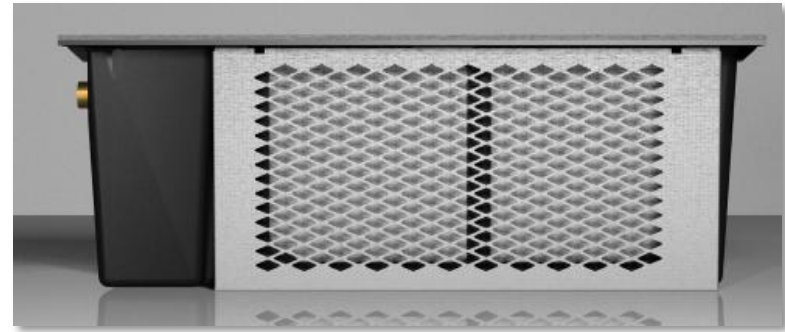
- 8,000 BTUs per hour for over 10 hours
- Monitors cab temperature changes and adjusts speeds 1,000 times per second
- System intelligence matches the output to need
- High efficiency continuously variable speed fans
- Mounts to rear of sleeper and takes up no interior storage space



- Driver Retention
- Maximum run times
- Maximum A/C performance

Condenser Module

- Continuously variable speed 350V Brushless DC compressor
- Sophisticated software coordinates compressor speed with changes in temperature
- Mounts to underside of the cab
- Few moving parts means no maintenance



- Longer run times
- No maintenance cost or down time

Power Management Module

- Directs flow of energy between battery banks
- Patented 'Start Assist'
- Factory set charge profile
- Effectively increases alternator performance



- Ensures maximum run time and prolonged battery life
- Eliminates the need for an alternator upgrade
- Eliminates jump starts

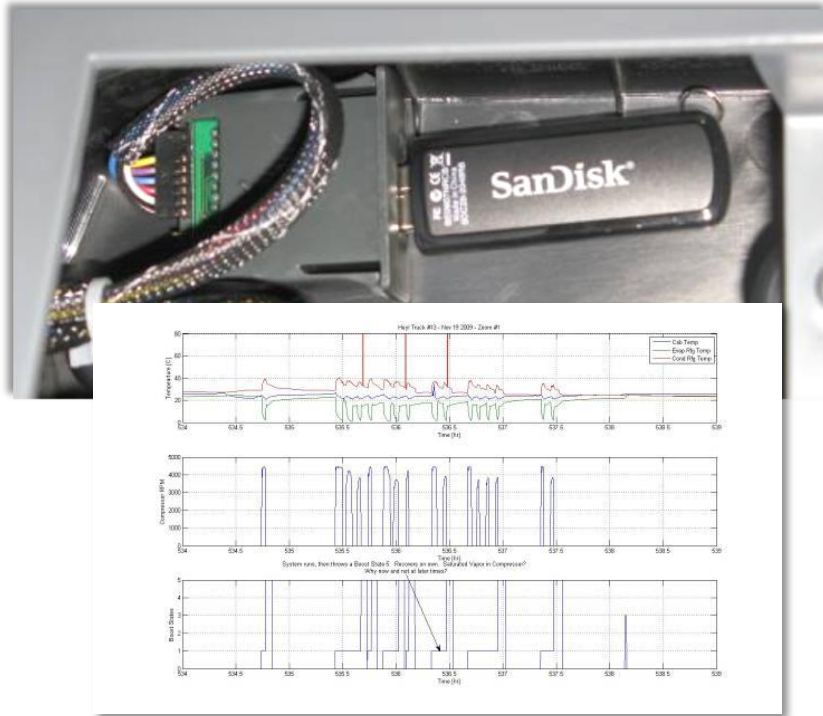
ClimaCab Touch Screen



- Easy to read back lit display
- Intuitive operation
- Fleet usage protocols
- Analyze operational data
- Diagnostic interface
- Integrates with Espar and Webasto heaters

- Maximum energy savings
 - Fleet management
 - Timely trouble shooting

The Data Logger



- System operation
- Duration
- Temperatures
- Compressor Speeds
- System States
- Battery Voltages

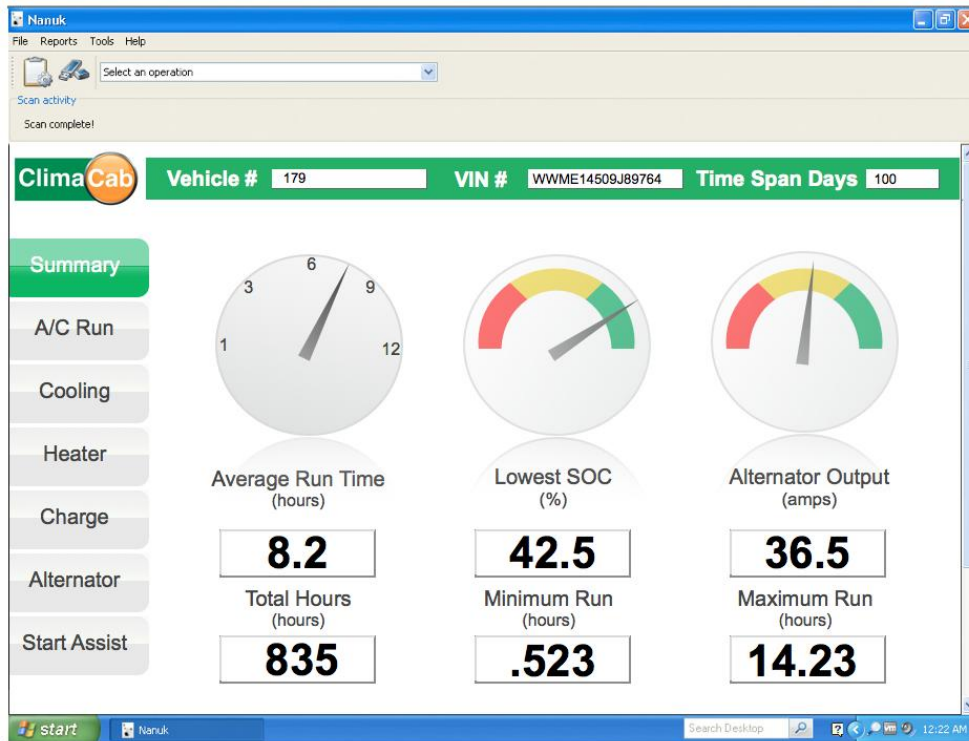
System operation records



ClimaCab Compass™

APU System Operation Documentation

- Every ClimaCab® unit comes equipped with a USB-based data port that collects run-time information
- The ClimaCab Compass™ program converts that data into management information you can use to monitor and control the use of your electric APUs
- Understand fuel savings, run time, battery state of charge, temperature averages etc.



Note:
Dashboard format in development
Data available now



ClimaCab ROI Comparison

	Truck Idle	Diesel APU	ClimaCab
Annual Idle			
- 8hrs/day, 5 days/week, 50wks/year	2000	2000	0
- Gallon per hour	1	0.3	0
- Annual fuel consumption/ gallons	2000	600	0
- Current price for diesel	3.87	3.87	3.87
- Annual Fuel Expense	\$7,740.00	\$2,322.00	\$0.00
- Annual Maintenance	\$0.00	\$700	\$0.00
Maintenance plan		\$400	
Oil / filters		\$300	
Annual operating cost	\$7,740.00	\$3,022.00	\$0.00
Annual Operating savings	\$0.00	\$4,718.00	\$7,740.00
Installed system		\$8,000	\$8,000
Incremental cost		\$0	\$0
- particulate filter			
Initial APU cost		\$8,000	\$8,000
Years of ownership (4 year trade)	4	4	4
Total Cost of Ownership	\$30,960.00	\$20,088.00	\$8,000.00
1 truck			

Head to Head

ClimaCab	Bergstrom / ParkSmart	Tripac E	Diesel APU's
8,000 BTU's/HR of Cooling	5,000 BTU's/HR of Cooling	7,200 BTU's/HR of Cooling	Not legal in all states
10 + hours of runtime	6-8 hours of runtime	No mention of runtime	Burns .3 gallons of diesel / hr
Guarantees will exceed TMC RP-432 air conditioning spec	No Guarantees	No Guarantees	Costs \$2,500-\$3,000/yr to operate (counting fuel and maintenance)
No alternator upgrade required	275 amp alternator required	200 amp alternator required	
Panasonic digital Thermostatic control	No Thermostatic control	No Thermostatic control	
Start Assist feature Jump Starts the truck	No Jump Start feature	No Jump Start feature	
Power Management Module	No Power Management	Single battery power management	
Load Sharing allows up to 30 hours of cooling	No Load Sharing feature	Load Sharing needed run times greater than 8 hours	
Takes no storage space from under the bunk	Mounts under bunk (takes storage from driver)	Mounted under bunk (takes storage from driver)	
Uses 4 Auxiliary AGM batteries	Uses 4 Auxiliary AGM batteries	Requires 8 Auxiliary AGM batteries	
466 LBS	450 LBS	565 LBS	
4 Year Full Replacement warranty on batteries	18-24 month Pro-rated warranty on batteries	4 Year warranty on batteries	



CSA 2011 Focused

Comprehensive Safety Analysis

- Temperatures below 55F or above 75F disturb sleep and can create sleep apnea, a leading cause of driver accidents.
- Drivers simply set a desired temperature, then get a good night's sleep
- ClimaCab® maintains the temperature of the bunk area by constantly sensing the temperature and controlling its variable speed compressor
- Over 10 hours no-idle temperature control

