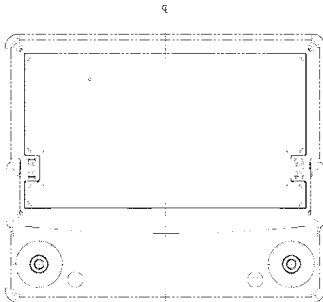




**12V 180 watts/cell
at 4C (15 min.) rate**

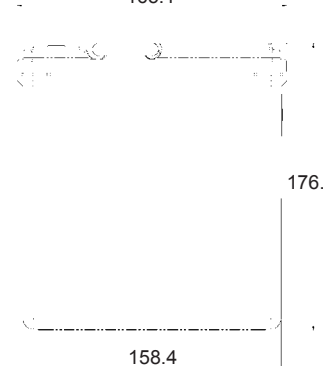


197.1



190.2

165.1



158.4

KEY FEATURES

Specifically designed and engineered for mission critical applications

- Performance excels at high rates of discharge and recharge
- 3 year warranty
- Advanced automation in manufacturing processes ensure consistency and reliability
- Advanced AGM materials significantly enhance performance and reliability
- Exceptional performance under deep or shallow cyclic discharge applications
- Operational within an extreme temperature range
- High cyclic capability +500 C/3 at 80% Depth of Discharge
- Advanced 3 stage terminal design to ensure leak free operation
 - Female M6 brass terminals provide maximum performance
- Thermally sealed PC/ABS plastic casing and cover
 - Flame retardant (UL 94 VO) and LOI of at least 28%
 - Designed to withstand extreme degrees of temperature and pressure
- Approved as non-hazardous cargo for ground, sea and air transport
 - DOT 49CFR173.159(d), (i) and (ii)
- All NorthStar products are compliant with
 - Telcordia SR4228, Bellcore GR-63-Core, Issue 1
 - British and German telecom standards
 - UL Approved
- Northstar is Registered to ISO 9001: 2000 & ISO 14001: 1996

ELECTRICAL CHARACTERISTICS

	NA Standards (77°F)	Int'l Standards (20°C)
4C (15 min.) Power to 1.67 VPC	180 watts per cell	168.7 watts per cell
Float Voltage	2.27 +/- 0.02 volts per cell	2.29 +/- 0.02 volts per cell
Cyclic Recharge	2.45 VPC (no limit on current)	
Shelf Life	2 years	
Impedance (1KHz)	0.0045 ohms	
Short Circuit Current	2000 Amps	
Nominal Voltage	12 Volts	

CONSTANT POWER DISCHARGE RATINGS

End of Discharge (Volts)	watts/cell at 25°C (77°F)								
	Duration (minutes)								
	2	5	10	15	20	30	45	60	120
1.75	520.5	341.8	225.7	171.4	139.3	102.5	74.2	58.6	32.6
1.70	570.6	362.2	235.0	177.2	143.4	105.0	75.8	59.8	33.2
1.67	597.4	372.5	239.5	180.0	145.4	106.2	76.6	60.4	33.5
1.65	613.6	378.4	242.1	181.5	146.5	106.9	77.1	60.7	33.7
1.60	647.4	389.7	246.7	184.2	148.4	108.1	77.9	61.3	34.0

MECHANICAL CHARACTERISTICS

	SI Units	English Units
Height	176.0 mm	6.93 inches
Width	165.1 mm	6.50 inches
Length	197.1 mm	7.76 inches
Weight	16.0 kilograms	35.3 pounds
Terminal Torque	6.0 Newton-meters	53 inch-pounds

CONSTANT CURRENT DISCHARGE RATINGS

End of Discharge (Volts)	Amperes at 25°C (77°F)								
	Duration (minutes)								
	2	5	10	15	20	30	45	60	120
1.75	292.4	185.1	119.4	89.6	72.2	52.6	37.8	29.7	16.4
1.70	324.2	198.1	125.3	93.2	74.7	54.1	38.7	30.4	16.7
1.67	341.6	204.7	128.2	94.9	76.0	54.9	39.2	30.7	16.9
1.65	352.3	208.6	129.8	95.9	76.7	55.3	39.4	30.9	17.0
1.60	375.3	216.2	132.9	97.7	77.9	56.0	39.9	31.3	17.2

For additional current, capacity and power information refer to the NSB detailed performance tables.