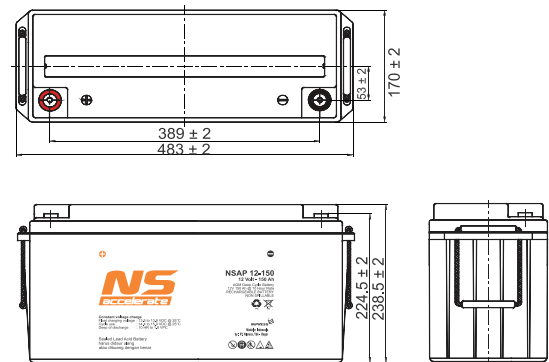
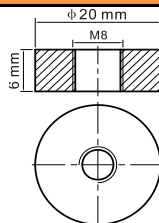


TECHNICAL SHEET
NSAP 12-150

NSAP 12-150 is a top terminal battery with AGM technology is specially designed for Telecommunication use with over 10 years design life at 25 °C. NSAP type also comply with IEC 60896-21/22, standard battery for Stationary Lead Acid batteries. The adoption of centralized venting system make sure the battery can be installed in any location and guarantees high security and reliability.

VIEW

DIMENSIONS

TERMINAL SIZE

WEIGHT AND DIMENSION

Battery Weight	: Approximate	43.5 Kg
Length	: 483 ± 2	mm
Width	: 170 ± 2	mm
Height	: 238.5 ± 2	mm
Total Height	: 238.5 ± 2	mm

PERFORMANCE

Nominal Voltage	: 12 V
Capacity 10 h (C ₁₀)	: 150 Ah
Max Discharge Current	: 1500 A (5 sec)
Internal Resistance	: Approx. 3.5 m Ω
Normal Operating Temp. Range	: 25°C ± 5°C
Float charging Voltage	: 13.5 to 13.8 VDC/unit@25°C
Recommended maximum charging current limit	: 44 A
Equalization and Cycle Service	: 14.4 to 15.0 VDC/unit@25°C
Self Discharge	: Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

COVER AND CONTAINER

Material	: A.B.S. UL94-HB, UL94-V0 Optional.
Type	: NSAP 12-150
Terminal	: T11

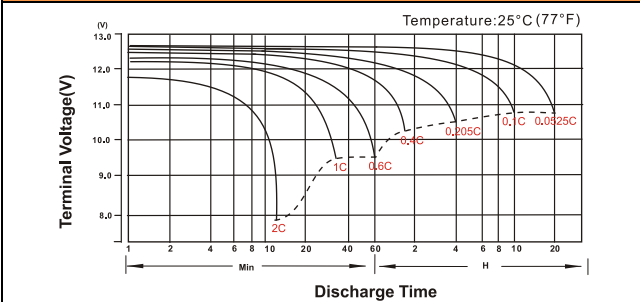
OTHER

Operating Temperature Range	-15°C to 50°C	Discharge
	0°C to 40°C	Charge
	-15°C to 40°C	Storage

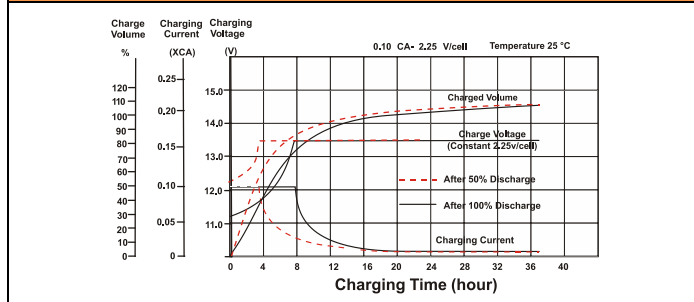
PT. NIPRESS Tbk

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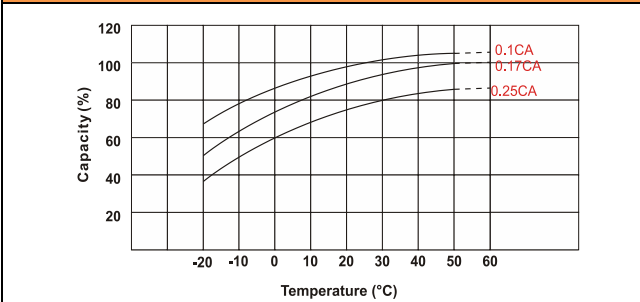
Discharge Characteristic Curve



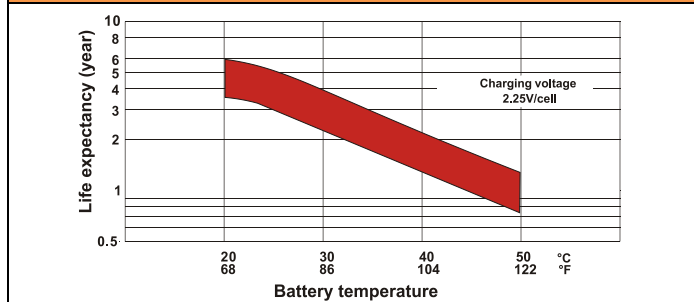
Float Charging Characteristics



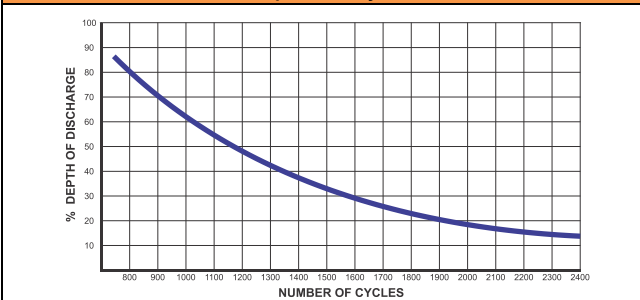
Temperature Effects in Relation of Battery Capacity



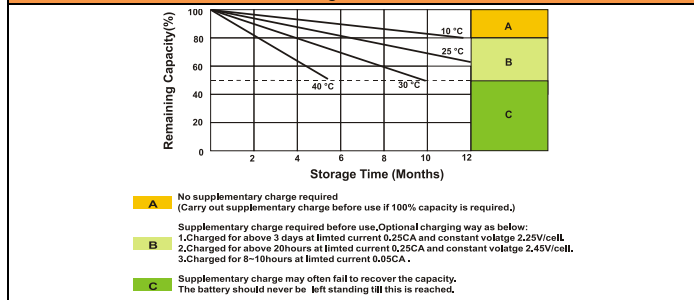
Effect of Temperature on Long Term Float Life



Graphic Life Cycle



Self Discharge Characteristics



Constan Current Discharge (Amperes) at 25 °C

F.V/Time	10 min	15min	20min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85 V/cell	201.80	171.60	143.60	114.10	86.40	70.70	45.00	35.60	28.80	23.50	20.40	16.60	14.20	7.73
1.80 V/cell	257.90	207.40	169.70	134.60	100.40	79.20	49.20	38.30	30.30	25.20	21.90	17.60	15.00	7.80
1.75 V/cell	283.40	226.50	182.60	139.80	104.20	82.90	51.00	39.00	31.10	25.80	22.50	17.90	15.10	7.88
1.70 V/cell	308.90	241.80	191.90	145.50	108.40	85.50	53.00	40.10	31.80	26.50	23.00	18.10	15.30	8.03
1.67 V/cell	333.30	257.20	203.80	153.50	111.10	88.40	54.50	41.80	32.60	27.20	23.50	18.40	15.60	8.13
1.60 V/cell	361.90	275.00	217.10	162.00	115.80	91.50	56.30	43.10	33.30	28.10	24.00	18.60	15.80	8.18

Constant Power Discharge (Watt/cell) at 25 °C

F.V/Time	10 min	15min	20min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85 V/cell	372.80	320.30	270.60	217.50	166.00	136.40	87.50	69.40	56.30	46.00	40.10	32.70	28.00	15.30
1.80 V/cell	470.80	381.80	315.20	252.70	191.60	152.00	94.80	74.30	58.80	49.10	42.90	34.60	29.60	15.40
1.75 V/cell	509.00	411.90	335.80	260.20	196.90	158.30	98.00	75.40	60.20	50.30	43.90	35.10	29.90	15.60
1.70 V/cell	542.20	433.60	350.30	269.30	204.00	162.70	101.70	77.30	61.50	51.40	44.80	35.60	30.20	15.80
1.67 V/cell	579.80	457.50	369.30	281.80	207.20	167.00	103.90	80.20	62.70	52.70	45.60	36.10	30.70	16.00
1.60 V/cell	615.10	481.20	389.20	295.40	214.80	172.00	106.90	82.30	63.90	54.20	46.50	36.30	31.00	16.10

All mentioned values are average values (Tolerance ± 2 %)