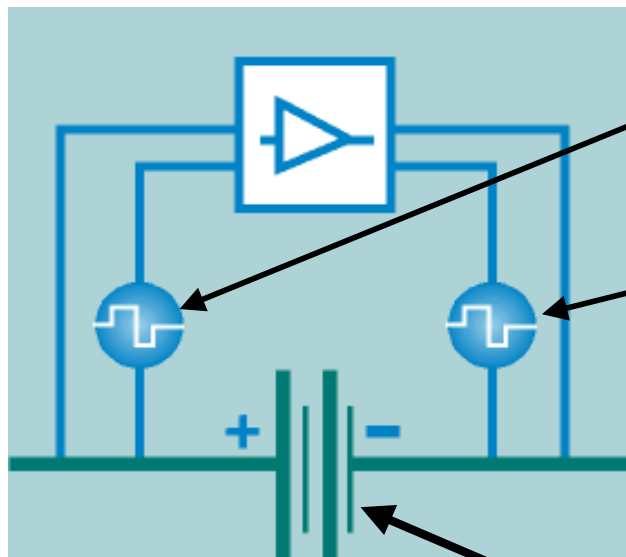


# How Conductance Test Is Performed (IEEE Standard 1188-1996)

(IEEE에서 규정한 CONDUCTANCE 측정원리)



1. A low voltage A/C Signal is Impressed across the battery terminals ( $V_{AC}$ )
2. The A/C Current ( $I_{AC}$ ) Response is measured
3. Conductance ( $G$ ) is calculated using Ohm's Law:  
 $G = I_{AC}/V_{AC}$

Plate Surface Area

Conductance measurements can be performed by applying a voltage of known frequency and amplitude across a cell / unit and observing the AC current that flows in response to it. The conductance is the ratio of the AC current component that is in-phase with the AC voltage, to the amplitude of the ac voltage producing it. (p.15)

Significant changes in the value typically indicate a significant change in the cell, which may be reflected in its performance. (p.15). **Changes in ohmic values in excess of 20% should be considered significant.** (p.15)

Conductance 의 측정은 측정장비가 특정한 주파수(frequency)의 AC 전압을 측정하고자하는 전지(cell) 에 인가하고 이를 증폭시켜 되돌아오는 AC 전류의 값을 측정함에 의하여 측정되어집니다.

Conductance 는 AC 전류를 생성하기위한 AC 전압의 크기(량) 에 상관된 AC 전류량의 비율입니다

측정된 Conductance 값의 큰 변화는 통상 전지내부에 큰 변화가 있음을 의미하며 이는 전지용량(성능)에 영향을 미치는 것입니다.

Conductance 값(저항관련값)이20%를 초과하는 것은 매우 심각한 것으로 고려해야 합니다.

