

## OUTDOOR CABINETS

# STREET-SIDE ENCLOSURES



*Seen here is a 3-bay Outdoor Enclosure*

In our tropical climate dust, heat and humidity are ever-present. These severely affect the reliable functioning and life of electronic equipment – especially when exposed to the outdoor environment. The family of Outdoor Cabinets and Enclosure Systems now introduced by APW President has been carefully engineered to combat these conditions.

APW Presidents Outdoor Enclosures are meant to be used in unprotected outdoor/streetside environments. Careful design consideration has been given to making these enclosures as physically secure and vandal-proof as possible.

### Features

- All-aluminium frame construction for corrosion-free life
- Double wall construction for maximum sealing effect
- No welding. Entire frame structure and inner skin is bolted, sealed and powder-coated as one assembly to achieve maximum sealing and eliminate corrosion
- Physical security. Outer walls of heavy gauge steel for strength, zinc plated for high corrosion resistance
- Finish. Powder coated with pure polyester powder to maximize long corrosion-free life



*Side view showing MDF*

### Material and Finish

- Main structural frame made from proprietary extrusions. Inner skin of 1.2mm aluminium sheet for extremely long life corrosion resistance. Outer panels made from 1.5mm thick electro galvanized sheet steel.
- The aluminium frame with the inner aluminium skin are fully assembled, sealed and then powder coated in a walk-in powder coating booth. This ensures extremely tight sealing against ingress of water and dust - beyond IP55 level.
- The outer panels of sheet steel are also powder coated with pure polyester to maximise long, corrosion-free life.



*Inside view of MDF compartment*

## Thermal Management

The cost effective Thermal Management solution offered with these cabinets is based on limiting the temperature rise within the cabinet by moving a large volume of air constantly past the heat emitting components. This prevents heat build-up so that local hot spots cannot form. Temperature equalization takes place due to heat being conducted away rapidly. Thus internal temperatures can be maintained within 5° C of the ambient - much more effectively than is possible by air-to-air Heat Exchangers, which have been found to be ineffective in tropical climates.

- Double Wall Construction. Between the inner skin and the outer panels there is a 30mm air gap. This provides excellent insulation from direct Solar Radiation.
- High Volume / High Reliability DC Fans. Two 48V DC fans each of 2350 cubic meter per hour (1450 CFM) capacity work in a PUSH-PULL arrangement. The fan mounted in the door pressurizes the electronics equipment bay with clean, dust-free air. The second fan, mounted as an exhaust fan in the ceiling, pulls this large volume of air out of the cabinet and blows it out between the double skins, thus enhancing the insulating action of the double skins.

## Optional Accessories

- Cable Management - A full range of compatible Cable Management accessories are available. These make it possible to provide neat, systematic structured cabling within the cabinet.
- All Accessories are easy to install, remove for cleaning, or to replace-such as Fan Assemblies, Dust Filters, Batteries, Cable Grommets etc.



*Electronics Bay with hinged 19" swing frame, and battery compartment with heavy duty shelves*



*Outer panel seen detached*



*DC fan fitted on door*