

Amphenol®

Application Note

IAN-48



Circular Metal Bayonet (CMB) Connector – Traffic Control

BACKGROUND

Modern traffic controllers are solid state, (as opposed to electro-mechanical) housed in cabinets, and contain a power panel to distribute electrical power in the cabinet; a detector interface panel to connect to loop detectors and other detectors; detector amplifiers; the controller itself; a conflict monitor unit; flash transfer relays; a police panel to allow the police to disable the signal; and other components.

PROBLEM

With so many functions contained in one cabinet there is a need for mass circuits to bring all the systems together. Cable assemblies and box receptacles are integral. High gold contact count (up to 61 contacts) to deliver signal, IP67 requirements, and low price points are common place in this market.

AIO SOLUTION

Amphenol created the Circular Metal Bayonet (CMB). A total commercial derivative of the PT, the CMB mates in a quarter turn, uses between 5 and 10 micro inches of gold instead of the standard 30. Meets IP67 requirements and can meet both the power and signal requirements of the cabinet.