Help just moments away with PushPull

For New York subway riders, customer assistance is just a push button away at the new wireless Help Point two-way communications panels. The Help Points, being installed on columns or walls inside stations, usually on the platform, allow passengers to communicate with the station booth for information and the transit system's control center for emergencies. The center can identify the station where the call originates and address each Help Point individually. All 468 stations will have Help Points by 2019, a deployment of over 6000 units, replacing an old, unreliable analog intercom with poor voice quality.

The vertical Help Point is a showcase for some state-of-the-art technology, including the flexibility and durability of HARTING's PushPull connector lineup. Distributing electrical signals within the narrow Help Point enclosure – just under eight inches (20 cm) wide – required a connector slim enough for that space yet rugged enough for the challenging transit environment. The New York subway has 277 underground stations, many cool and damp. The rest are outdoors. The Help Point's manufacturer, Boyce Technologies, had used Han® 3A connectors in previous transit communications projects, but their external bail made them a difficult fit here. Instead, Boyce found the desired fit and connectivity in Variant 4 PushPull connectors with their internal locking mechanism.

Boyce swaged the cast RJ45 PushPull insert into a custom chassis it had created for the Motorola access point that provides dual band WiFi and VoIP. PushPull models like an RJ45 cable assembly, seven-pin Hybrid and 10-pin Signal are being employed in various variants. "There are many Help Points versions because there are many installations that require different types of power, control, data, etc.," says Boyce president Charles Boyce. "We were able to use [PushPull connectors] for every single thing we wanted to do, whether it was controlling gates, or fans, whether it was gigabit Ethernet, Power over Ethernet, fiber, AC power [and] DC power. We were able to come up with a use for every single Variant 4 and every single pin." Their durability has surprised subway officials who had doubted they would stand up to the rigors of the transit environment. In fact, says Boyce, "there has not been a single failure of any PushPull cable assembly, any connector, any pin, anything at all."