



APPLICATION IN CABLE RAILWAYS

DATAEAGLE 3702A provides for trouble-free transport

Application

Roosevelt Island Tramway is an aerial cableway in New York City (USA), connecting Roosevelt Island and Manhattan. It is the oldest urban aerial cableway in North America serving for local public transport. Built in 1976, it was replaced by a completely new cableway system of POMA. The objective is to transfer information between the terminal and both cabins. Moreover, the emergency stop function shall be ensured via PROFIsafe.

Challenges

Since the terminal is located in Manhattan at the corner 2nd Avenue/E 60th Street directly and at Queensboro bridge but the cableway has to utilize the airspace above this street, it cannot run parallel, but only in a very acute angle to the bridge. The cable railway is 945 m in length and has three aerial lift pylons of up to 76 metres. This steep ascent of 76 metres in the center of

Manhattan with many radio interferences such as for example WLAN represents a challenge for automation technology. These restricted space conditions and contorted travel paths without any direct visual contact are a particular challenge to each transmission path.

Solution

The system equipped with a PROFIBUS Safety PLC should at no time cause any disturbances. The system features the **DATAEAGLE 3702A** for wireless PROFIBUS transmission with Bluetooth as the radio technology applied.

Result

Despite thousands of additional radio communications around the cable railway, the devices have been running since 2010 without malfunctions and downtimes of the cable railway.



1. Directional antennas of the **DATAEAGLE Classic 3702A master** at the control cabinet at a mast.



2. **DATAEAGLE Classic 3702A** in the protection cabinet at one of the two cabins.



1
0 m

2
945 m

"We are proud that our products – like the cable railway in New York – contribute to safety in passenger transport."

DIDIER KÄRST

Technical Sales Manager Schildknecht AG