FELS
GROUPE ESARIS INDUSTRIES

Mobilis Elite
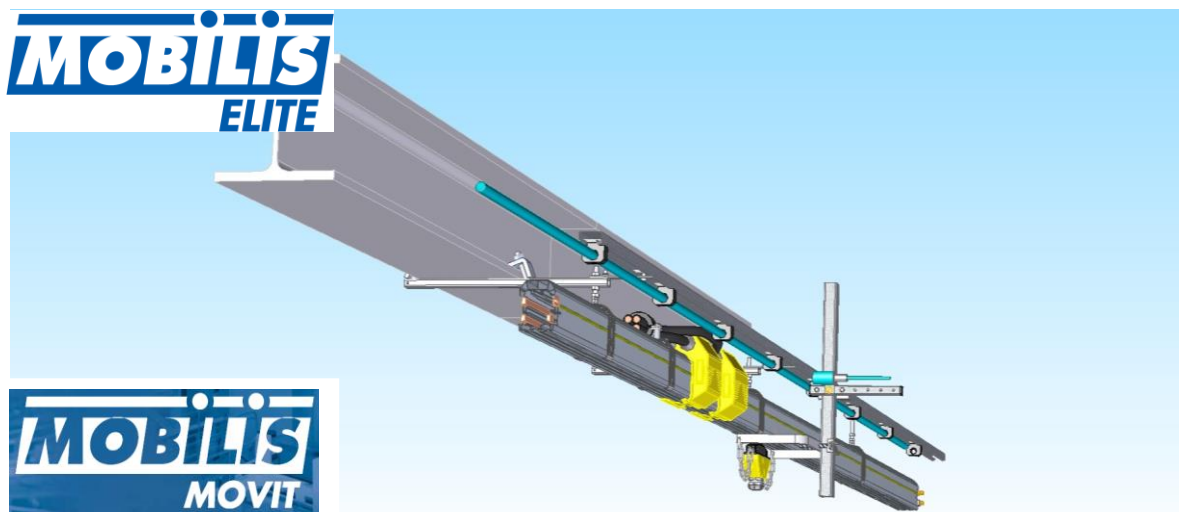20A-40A-60A-
100A-130A-160A-200A

Mobilis Movit
315A-450A-630A

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Data Transmission

NEW FUNCTION : **Contactless data transmission between fixed station and mobile machinery or between several mobile machinery units**
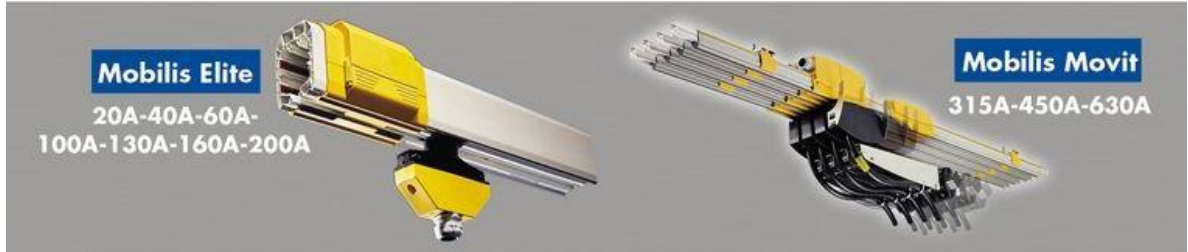
Main applications:

- Travelling of two cranes in tandem
- Anti-collision
- Automatic weighing
- Sending automated motion controls up to the unloading point
- Sending maintenance data
- Sending information from the lifted load
- Automated storage based on reading of material database
- Automated ERP storage

Operation principle:

- SIEMENS RCoax® System with MOBILIS® accessory
- Wireless WIFI short range transmission (1m)
- Fixed directional radiating cable associated with mobile receiving antennas
- Maximum number of mobile machinery units (travelling crane, hoists...): 8 per cable section of 200m max length
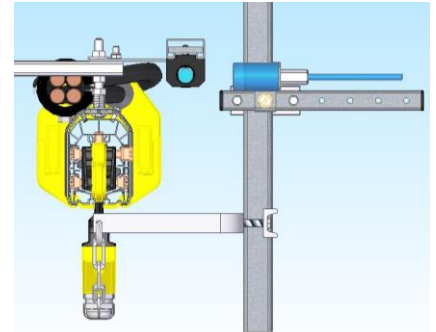
Main benefits:

- SIEMENS Standard
- Immune to dust
- Maintenance-free (no mechanical contact)
- Communication speed >24 Mbps (>3MB/s under HTTP)
- Strong WiFi (Transmission of radio waves through the slots of the RCoax ® cable and high tolerance to interferences thanks to a large frequency range)
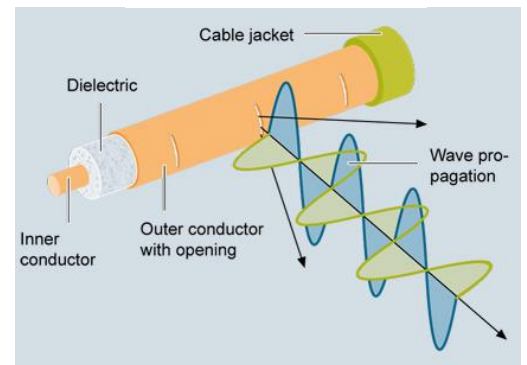- Does not interfere with Wi-Fi environment (short range)

Technical features:

- Operating temperature:
  - RCoax Cable and antenna: -30°C to +70°C
  - Communication Modules: 0°C to 55°C
- Protection Index IP 20 for standard version, optionnally up to IP65 (communication modules)
- Supported protocols:
  - Address Resolution Protocol (ARP): recognition of MAC addresses
  - ICMP Protocol: management of network errors
  - Telnet: communication with Internet host
  - HTTP/HTTPS: Internet Network
  - TFTP: for updating embedded software
  - SNMP v1/v2/v3: simple protocol of network management
  - DCP: configuration of network and IP addresses
  - LLDP (except Client Module IP20) : replacing proprietary protocols
- Ethernet Networks (e.g. Profinet with Profisafe). The protocol used is transparent for the Ethernet System in input or output.
- Travel speed of mobile devices:
  - Elite: 180m/min
  - Movit: 600m/min
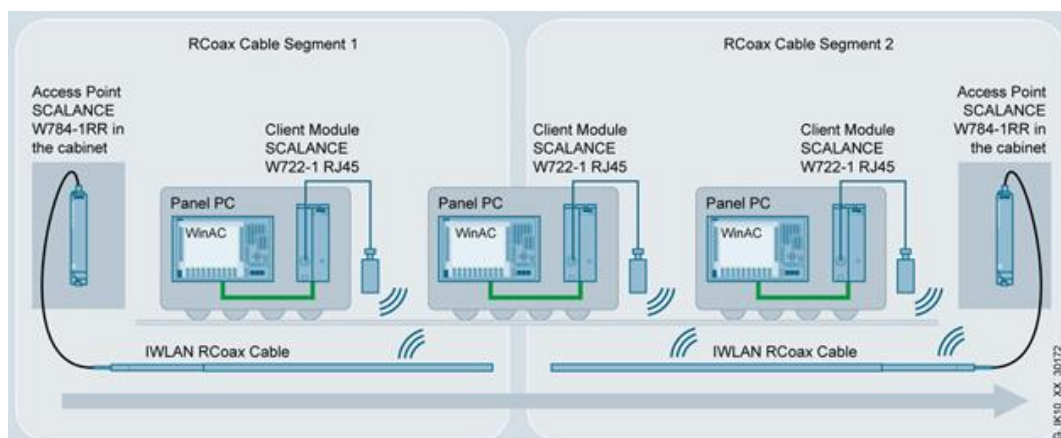- Length of cable supporting elements: 6m

Mobilis Elite with RCoax illustration

Cable working principle

Installation Diagram :

Industrial Ethernet /Profinet Input

This new accessory includes 6 components:
1. An access point to be connected to the Industrial Ethernet network by RJ45, supplied with 24VDC
2. A special cable segment RCoax (2.4GHz or 5GHz) and its accessories
3. A special short range antenna (30mm - 70mm distance from RCoax cable for 2.4GHz frequency band, and 100mm for 5GHz frequency band)
4. A Client Module with Industrial Ethernet RJ45 Output, power supplied with 24VDC
5. A RCoax cable supporting device for fixing to the structure
6. A mobile antenna supporting device

Product references and prices: please enquire   30 July 2015