# Urban Transport

## **Guided Light Transit System**





Guided Light Transit (GLT) offers city planners and developers a new approach to integrating transit within constrained urban areas. Operating on an exclusive right of way, the GLT tram runs on rubber tires and is guided during street operation by a single center beam set into the roadway. In addition, GLT requires less infrastructure than traditional trams, because it uses only one center beam (rather than two rails) and needs no special maintenance facilities.

Capable of operating on street gradients up to 13% and negotiating 39-foot radius curves during normal operation, GLT trams offer exceptional urban maneuverability. Propulsion is electric via an overhead catenary system, while auxiliary diesel-electric power permits movement to and from off-line maintenance facilities.

Similar in appearance to a European street tram, the stylish, articulated vehicles meet high comfort standards for passengers with 100% low floors and air-conditioned interiors. Wide panoramic windows allow passengers unobstructed views of the cityscape. In 1998, Bombardier supplied 25 trams to Nancy, France, which operate on the city's existing trolleybus network. A similar system with 24 trams opened in November 2002 in Caen, France.





### Guided Light Transit System

#### **GENERAL DATA**

TYPE OF VEHICLE

Guided Light Transit (GLT)

#### **DIMENSIONS & WEIGHT**

LENGTH

24.5 m / 80' 5"

WIDTH

2.5 m / 8' 2 1/2"

**ROOFTOP TO TOP OF RUNNING SURFACE** 

3.38 m / 11' 2"

FLOOR TO TOP OF RUNNING SURFACE

0.320 m / 12 1/2"

INTERIOR FLOOR TO CEILING

2.4 m / 7' 10 1/2"

**DOORWAY WIDTH** 

2.6 m / 8' 6"

DOORWAY HEIGHT

2.03 m / 6' 8"

NOMINAL WHEEL TRACK

1.95 m / 6' 4 3/4"

**VEHICLE WEIGHTS** 

empty AW0: 27,000 kg / 59,500 lb maximum: 38,500 kg / 84,800 lb

#### TECHNICAL CHARACTERISTICS

POWER DISTRIBUTION

750 Vdc

**PROPULSION SYSTEM** 

AC traction motors

**VEHICLE GUIDANCE** 

center beam or unguided

**BRAKING** 

dynamic regenerative drum

SUSPENSION

pneumatic

**TRUCKS** 

four single axle bogies

LOAD TIRES

8 per vehicle with internal run-flat

**GUIDE WHEELS** 

two per axle - solid steel

**EMERGENCY BRAKING** 

drum

**CARBODY** 

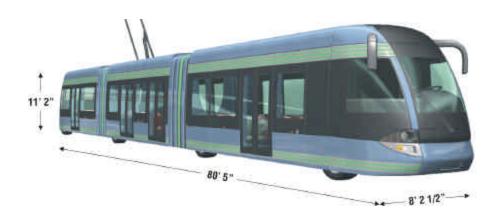
aluminum

WINDOWS

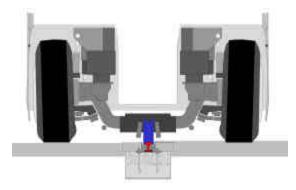
fixed, tinted glazing

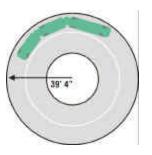
**DOORS** 

4 per vehicle









Turning radius

Central Guiding System

#### **PERFORMANCE & CAPACITY**

MAXIMUM DESIGN SPEED

70 km/h / 43 mph

**ACCELERATION RATE** 

limited to 1 m/s<sup>2</sup> / 2.2 mphps

MINIMUM HORIZONTAL CURVE RADIUS

12 m / 39' 4"

MAXIMUM SUSTAINED GRADIENT

13%

NOMINAL PASSENGER CAPACITY

143

#### WHEELCHAIR LOCATIONS

2 or 4 per vehicle

(depending on configuration)

**SEATED PASSENGERS** 

48 or 55

(depending on configuration)

**CAPACITY** 

@ 4 pass./m² (2.7 sq. ft./pass.) 143 or 147 (depending on configuration) @ 6 pass./m² (1.8 sq. ft./pass.)

178 or 213 (depending on configuration)

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