

DAIMLER

IEEE RTPGE information

Update on Required Cable Length

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long haul examples

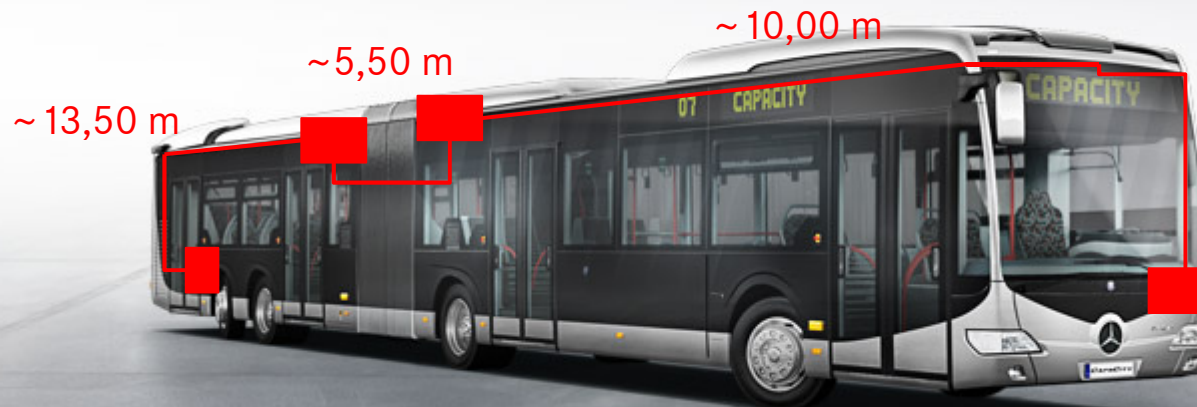
Some examples for long haul applications within Daimler today:

- EvoBus CapaCity (~30m) / Travego (~20m)

Next generation of public buses is up to ~25m
(5m extra length !)

exemplary length for capacity

EvoBus CapaCity, length 19,54m



long haul examples

Some examples for long haul applications within Daimler today:

- EvoBus CapaCity (~30m) / Travego (~20m)

Next generation of public buses is up to ~25m (5m extra length !)

link1: driver → engine compartment ~ 31,80m

link2: front → rear cam ~ 22,96m

EvoBus CapaCity, length 19,54m



long haul examples

Some examples for long haul applications within Daimler today:

- EvoBus CapaCity (~30m) / Travego (~20m)

link 1: driver → rear cam, ~20m

EvoBus Travego, length 14,03m



long haul examples

Some examples for long haul applications within Daimler today:

- EvoBus CapaCity (~30m) / Travego (~20m)
- Mercedes Benz Sprinter/ VW Crafter (~ 15m)



Mercedes Benz Viano



long haul market potential

- Market Share Mercedes Benz Vans (year 2010/2011)

see: „Geschäftsbericht 2011“: http://www.daimler.com/Projects/c2c/channel/documents/2125318_Daimler_2011_Gesch_ftsbericht.pdf

→ more than 200.000 vehicles/year
(Sprinter, Vario, Vito and Viano)

estimation: 4 camera surround view system:

8ports/vehicle ~ 1.600.000 ports/year

use cases: surround view, rear view camera,...

4.06

Absatz

	2011	2010	11/10
	Veränd. in %		
Gesamt	264.193	224.224	+18
Westeuropa	178.335	156.775	+14
davon: Deutschland	77.585	62.193	+25
Osteuropa	22.646	16.404	+38
USA	18.027	10.482	+72
Lateinamerika (ohne Mexiko)	13.659	12.528	+9
China	13.514	12.151	+11
Übrige Märkte	18.012	15.884	+13

- Market Share EvoBus (year 2010/2011)

see: „Geschäftsbericht 2011“: http://www.daimler.com/Projects/c2c/channel/documents/2125318_Daimler_2011_Gesch_ftsbericht.pdf

→ roughly 39.000 buses/year

estimation: 6 camera surround view system:

12ports/bus ~ 468.000 ports/year

use cases: surround view, passenger compartment surveillance cameras,...

4.08

Absatz

	2011	2010	11/10
	Veränd. in %		
Gesamt	39.741	39.118	+2
Westeuropa	5.943	7.168	-17
davon: Deutschland	2.214	2.635	-16
NAFTA	4.042	3.878	+4
Lateinamerika (ohne Mexiko)	25.048	23.215	+8
Asien	1.667	1.462	+14
Übrige Märkte	3.041	3.395	-10

conclusion

- To support 15m is necessary with a cost effective solution (UTP) for cars, vans light trucks etc.
- 40m must be reached for buses, however a better cabling (e.g. shielded or lower losses) is a possible solution in this case.