

Class 710 Stock

London Overground



Built by Bombardier Transportation UK, Derby 2015-2019. Entering service in 2019
Maintained by Bombardier Transportation

Principal Characteristics

Track Gauge:	1435 mm
Current System:	Single voltage unit – 25kV ac Dual voltage units – 25kV ac and 750V dc
Types of Vehicle:	DMS1 Driving Motor Standard PMS(W) Pantograph Motor Standard Wheelchair MS1 Motor Standard MS2 Motor Standard DMS2 Driving Motor Standard
Formation per Unit:	Four or Five car Multiple Units of formation combinations up to 12 cars
Formation per 4 Car Unit:	DMS2-PMS(W)-MS1-DMS1
Formation per 5 car Unit:	DMS2-MS2-PMS(W)-MS1-DMS1
Number of Trains:	30x4 car AC Units 18x4 car DV Units 6x5 car DV Units
Operation:	Driver Only Operated (DOO)

Equipment Details

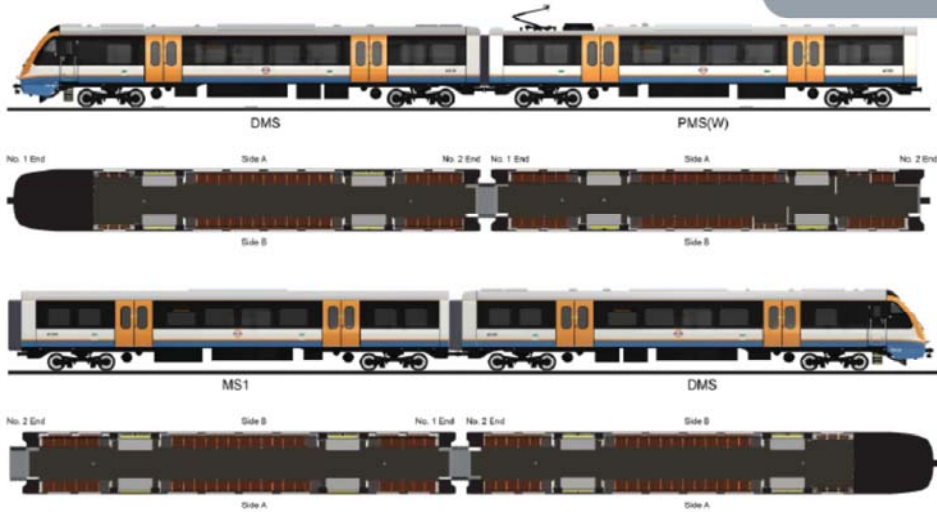
Bodies:	Aluminium extrusions welded and huck-bolted (FICAS Technology) Through gangways provided between cars within each unit with internal and external bellow and overlapping sliding plat
Bogies:	Bombardier FLEXX Eco
Couplers:	Dellner 12 auto-couplers
Traction System:	Bombardier 3 phase AC, two motored axles per car Regenerating braking capability
Compressor:	Knorr-Bremse VV120T two stage oil-free reciprocation – asynchronous induction motor
Brakes:	Knorr-Bremse RZKK and RZTS with 2 actuators per axle except DMS number 1 axle not braked
Auxiliary Power:	Bombardier Auxiliary Converter, two primary modules per unit fitted to DMS cars
Supplies:	110V dc control system with 122Ah batteries fitted on DMS cars
Saloon Lighting:	LED ceiling washlights running longitudinally along entire car length LED spotlights 14-16 per car LED gangway lights on either side of treadplate
Emergency Lighting:	Portion of saloon lights with independent power supply
HVAC:	One roof mounted saloon air conditioning module per car supplying ceiling mounted air ducts Separate module on DMS cars for driving cab
Passenger Information:	LED external front facing display fitted on each DMS car and one external platform facing LED display on each side of each car Centre ceiling two-sided internal LCD display per car and side ceiling displays interspersed with the advertisement cards
CCTV:	DOO CCTV displays on two monitors on driving cab desk with images fed from bodyside mounted cameras Saloon CCTV images viewable from the driving cab and recorded digitally
Doors:	Four electrically operating sliding plug doors per side configured as two double doorways per side of each car Fitted with obstacle detection plus threshold lighting when doors are open

Unit and Vehicle Details and Statistics

	DMS1	PMS(W)	MS1	MS2	DMS2
Length of Car:	21446mm	19990mm	19990mm	19990mm	21446mm
Width of Car:	2772mm	2772mm	2772mm	2772mm	2772mm
Height of Car:	3760mm	3760mm	3760mm	3760mm	3760mm
Tare Weight AC:	39 tonnes	36 tonnes	31 tonnes	31 tonnes	39 tonnes
Tare Weight DV:	42 tonnes	36 tonnes	31 tonnes	31 tonnes	42 tonnes
Tare Weight of 4 car AC Unit:	144 tonnes				
Tare Weight of 4 car DV Unit:	151 tonnes				
Tare Weight of 5 car DV Unit:	182 tonnes				
Passenger Door Open Width:	1450mm	1450mm	1450mm	1450mm	1450mm
Vehicle in Stock:	54	54	54	6	54



**UNIT DIAGRAM
4 CAR CL710/2**



Passenger Capacity:

DMS	PMS(W)	MS1	DMS	TOTAL
43 Seats	51 Seats	52 Seats	43 Seats	199 Seats
6 Priority Seats	6 Priority Seats	8 Priority Seats	0 Priority Seats	26 Priority Seats
	2 Wheelchair Spaces			2 Wheelchair Spaces
				499 Standing Passengers

**UNIT DIAGRAM
5 CAR CL710/2**



Passenger Capacity:

DMS	MS1	PMS(W)	MS2	DMS	TOTAL
43 Seats	52 Seats	51 Seats	52 Seats	43 Seats	241 Seats
6 Priority Seats	8 Priority Seats	8 Priority Seats	8 Priority Seats	0 Priority Seats	28 Priority Seats
		2 Wheelchair Spaces			2 Wheelchair Spaces
					614 Standing Passengers



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