

# Class 710 Stock

## London Overground



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

## Principal Characteristics

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

## Equipment Details

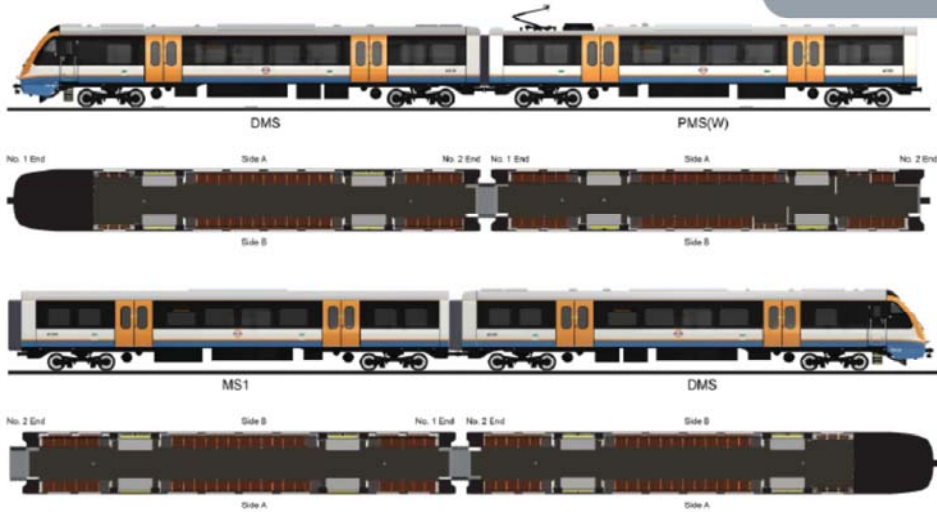
<b>Bodies:</b>	Aluminium extrusions welded and huck-bolted (FICAS Technology) Through gangways provided between cars within each unit with internal and external bellow and overlapping sliding plat
<b>Bogies:</b>	Bombardier FLEXX Eco
<b>Couplers:</b>	Dellner 12 auto-couplers
<b>Traction System:</b>	Bombardier 3 phase AC, two motored axles per car Regenerating braking capability
<b>Compressor:</b>	Knorr-Bremse VV120T two stage oil-free reciprocation – asynchronous induction motor
<b>Brakes:</b>	Knorr-Bremse RZKK and RZTS with 2 actuators per axle except DMS number 1 axle not braked
<b>Auxiliary Power:</b>	Bombardier Auxiliary Converter, two primary modules per unit fitted to DMS cars
<b>Supplies:</b>	110V dc control system with 122Ah batteries fitted on DMS cars
<b>Saloon Lighting:</b>	LED ceiling washlights running longitudinally along entire car length LED spotlights 14-16 per car LED gangway lights on either side of treadplate
<b>Emergency Lighting:</b>	Portion of saloon lights with independent power supply
<b>HVAC:</b>	One roof mounted saloon air conditioning module per car supplying ceiling mounted air ducts Separate module on DMS cars for driving cab
<b>Passenger Information:</b>	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
<b>CCTV:</b>	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
<b>Doors:</b>	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
<b>Length of Car:</b>	21446mm	19990mm	19990mm	19990mm	21446mm
<b>Width of Car:</b>	2772mm	2772mm	2772mm	2772mm	2772mm
<b>Height of Car:</b>	3760mm	3760mm	3760mm	3760mm	3760mm
<b>Tare Weight AC:</b>	39 tonnes	36 tonnes	31 tonnes	31 tonnes	39 tonnes
<b>Tare Weight DV:</b>	42 tonnes	36 tonnes	31 tonnes	31 tonnes	42 tonnes
<b>Tare Weight of 4 car AC Unit:</b>	144 tonnes				
<b>Tare Weight of 4 car DV Unit:</b>	151 tonnes				
<b>Tare Weight of 5 car DV Unit:</b>	182 tonnes				
<b>Passenger Door Open Width:</b>	1450mm	1450mm	1450mm	1450mm	1450mm
<b>Vehicle in Stock:</b>	54	54	54	6	54



**UNIT DIAGRAM  
4 CAR CL710/2**



**Passenger Capacity:**

<b>DMS</b>	<b>PMS(W)</b>	<b>MS1</b>	<b>TOTAL</b>
43 Seats	51 Seats	52 Seats	139 Seats
6 Priority Seats	6 Priority Seats	8 Priority Seats	26 Priority Seats
	2 Wheelchair Spaces		2 Wheelchair Spaces
			489 Standing Passengers

**UNIT DIAGRAM  
5 CAR CL710/2**



**Passenger Capacity:**

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



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