

# Classes 465 and 466 Networker electric multiple unit trains for British Rail



The Class 465 trains are the first of a family of new trains, which will be used throughout Network SouthEast.

Metro-Cammell's first order for Networkers covered 50 (Class 465) four-car trains. This was followed by an order for 43 (Class 466) two-car trains. Both the classes are designed for inner suburban service south of the Thames.

Most of the electrical and mechanical equipment on the Class 466 trains is identical to that on the Class 465 — the main difference being the additional cab to enable the two-car units to operate independently, allowing for greater operating flexibility, and thus easing overcrowding problems. Auto-couplers aid in rapid marshalling of train formations.

The bodysells are welded from lightweight aluminium extrusions with two pairs of wide-opening, sliding plug-doors on each side of the cars. Comfortable seating and attractive decor combine to provide a pleasant comfortable travelling environment.

Propulsion power is by GTO controlled, three-phase asynchronous traction motors. Regenerative braking, coupled with the low body-weight, will give significant savings in energy consumption, high reliability and low maintenance requirements.

**Data**

Track gauge 1,435mm  
 Service inner suburban  
 Traction supply 750V dc third rail

	<b>Class 465</b>	<b>Class 466</b>
Number of vehicles per unit	4	2
Capacity seats per unit	348	168
Unit length over couplers	81,900mm	41,600mm

**Vehicle length**

power car 20,800mm  
 trailer car 20,150mm  
 vehicle width 2,800mm  
 height 3,760mm  
 Bodyshell aluminium extrusions  
 Doors — per car (per side) 2  
 — width 1,280mm  
 Bogie centres 14,173mm  
 wheelbase 2,600mm  
 Wheel diameter 840mm  
 Primary suspension rubber chevron  
 Secondary suspension pneumatic  
 Number of motors and type 4 type G432 motors per power car  
 Traction control GTO controlled, thyristor inverters  
 supplying variable frequency  
 three-phase  
 Maximum speed 120km/h  
 Tare weight 4-car unit 135t 2-car unit 71t  
 Braking system blended regenerative/rheostatic/  
 pneumatic with slide protection.  
 mechanical braking is by wheel  
 mounted discs.

**About the GEC ALSTHOM Transport Division**

Metro-Cammell Limited and GEC ALSTHOM Traction Limited are both members of the GEC ALSTHOM Transport Division. The Division is one of the largest suppliers of railway rolling stock, with an annual turnover of £1,000 million and nearly 18,000 employees at factories in six countries. GEC ALSTHOM supplies the world's widest range of electric and

diesel locomotives and passenger rolling stock (high speed main-line, suburban, transit, light rail and people-movers). It has been supplying railway rolling stock continuously since 1823 — longer than any other manufacturer in the world. Whilst the majority of its production is in its own factories, technology transfer agreements permit local manufacture.



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