52777 (QA8216) 2707 DTAM Parts status & Replacement info

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**Summary**

2707 DTAM Part / Catalog Numbers and Series Explained with Replacement / Swap-out info included

**Question**

* Can I replace a 2707-XXXXX with a 2707-YYYYY?
* What is the difference between series A, B, C, and D?

Environment: 2707 DTAM Series

**Answer**

Customers currently have a choice of replacing an old DTAM with a newly-manufactured one from Spectrum Controls.

Spectrum Controls is the only current manufacturer of the DTAM Plus and DTAM Micro units and they do not offer all versions of these units that have existed previously. **Spectrum does not offer Microview units.**

As of February, 2015 only the DTAM Micro is currently being manufactured. DTAM Plus units are being sold until supply runs out. The only DTAM Plus unit that remains is**2707 L40 P2.**

In general, this is how to replace an existing DTAM with a Spectrum Controls DTAM:

Customer has DTAM Micro:

* Is it 2707-M232P3? Replace with 2707-M232P3SC.
* Is it 2707-M485P3? Replace with 2707-M485P3SC.
* Any other Micro (such as DeviceNet) has no replacement.
* Spectrum’s DTAM Micro units are new "V2" models that do not correspond to any of the Series info listed below.
* Spectrum’s DTAM Micro V2 units use a new "V2" version of the DPS software and cannot use any previous version.

Customer has DTAM Plus:

* The only DTAM Plus unit available from Spectrum is 2707-L40P2, and they are in limited quantities.

If you are attempting to replace a DTAM from something in your own stock, are purchasing a used DTAM or need to know the difference between catalog numbers and series, see the information below:

DTAM Plus (2707-L8P1, L40P2, V40P1, V40P2N, L8P1R, V40P2R, V40P2NR, etc)

2707- (**L** or **V**)(**8** or **40**)(**P1** or **P2** or **P4**) (**N** or no **N**) (**R** or no **R**) (**D** or no **D**)

* **L** = LCD Display or **V** = VFD (Vacuum Florescent) Display
* **8** = 8K Memory or **40** = 40K Memory
* **P1** = 15-23VAC (47 to 440 Hz) or 20-30VDC or **P2** = 85-265VAC (47 to 440 Hz) or 110-300VDC or **P4** = Indicates an Intrinsically Safe DTAM Plus
* **N** = Rated NEMA 4X
* **R** = Remote I/O Comms instead of Serial DF1/DH-485
* **D** = DeviceNet Comms instead of Serial DF1/DH-485

DTAM + Replacement / Swap-out Info:

* Series A units are not rated UL/SA Class 1 Div 2 Groups A,B,C,D - they were listed as "rating pending". They are not CE rated.
* Series B units are rated UL/SA Class 1 Div 2 Groups A, B, C, D and non-hazardous. They are not CE rated.
* Series B or higher Remote I/O units are rated for Class 1 Div 2 Groups A, B, C, D and are CE rated. The Series B Intrinsically Safe DTAM is CE rated.
* Series C and higher are CE rated.
* Series A and B units can use DPS (DTAM Programming Software) version 9. Series C units can as well and can also use version 10. **Series D units must use version 10, no exceptions.** Applications created in previous revisions should work in version 10.
* Series D units are the only units that can use DC power (L8P1, P40P1, and V40P1). These comply with CE 2002 surge requirements (EN61000-6-2).
* LCD Displays and VFD Displays are interchangeable, keeping in mind that VFD’s viewing distance is greater (can exceed 25 feet). Also note that the max operating temperature of LCD units is 45’C and the VFD unit’s max is 60’C.
* All DTAM+ models are the same size and cutout except that Remote I/O versions are 2.35 inches deep instead of 1.8 inches.
* You could replace an 8K RAM unit with a 40K unit. Keep in mind if you replace a 40K unit with an 8K the 8K can support only 50 screens, the 40K can support 244.
* You could not replace a non-Remote I/O unit with a Remote I/O unit or vice-versa. Same for DeviceNet units.
* All 40K RAM units have a real-time clock and a printer port.

DTAM Micro (2707-M485P3, M232P3D, etc)

2707-M (RS-**232** or RS-**485** serial port) (**D** or no **D**) P3

* **D** = DeviceNet comms instead of DF1/Data Highway-485.

The RS-232 version of the DTAM Micro is mostly used for CH0 comms with SLC’s and PLC5’s. The RS-485 is typically used for a SLC5/02. Both units can use DF1 or DH-485 comms.

DTAM Micro Replacement / Swap-Out Info:

If possible, swap a 232 with a 232 or a 485 with a 485. If you must a different model then you will have to convert the RS-232/485 using a signal converter, not a protocol converter. Both units use the same protocols, it is the electrical signal that must be converted. An RS-232 to RS-422 converter should work. A 1761-NET-AIC could be used as long as you are also using Data Highway-485 protocol - see [15301 - Connection Options for the 1761-NET-AIC (AIC+)](https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/15301)

* Series A units are not UL/CUL/CSA rated - listed as "rating pending".
* Series A and B units can store only 50 messages max.
* Series B and above units have CUL, CSA, UL Class 1 Div 2 Groups A, B, C, D or non-hazardous location usage ratings. They do not have CE certification (however the Series B DeviceNet units do have CE certification).
* Series C and above units have CE certification. They also have a higher max operating temperature than previous series units (55’C instead of 45’C). The amount of memory in series C and above units has been increased and they can store 244 messages.
* Series D added the Series C enhancements listed above to the DeviceNet units.
* Series C and D should be using at least DPS version 8.0.
* Series E units should be using DPS software version 10, no exceptions. These units comply with CE 2002 surge requirements (EN61000-6-2).

Microview

2707-MV**H**232 or MV**P**232

* **H** = Hand-held or **P** = Panel-mount

Microview Replacement / Swap-Out Info:

You should replace a hand-held with a hand-held and panel-mount with a panel-mount if possible although they are functionally equivalent.

Series B Microviews have CSA Class 1 Div 2 Hazardous Location, UL Class 1 Div 2 Hazardous Location, Class 1 Div 2 Groups A, B, C and D or non-hazardous and CE certification ratings.