

TECHNICAL NOTE

Understanding prEN50131-1:2004 - TABLE 10

It is clear from questions asked that Table 10 in prEN50131-1 is surrounded by confusion.

The table, with the PD6662:2004 clause E.1.1 addition included, appears as follows:

TABLE 10 – NOTIFICATION REQUIREMENTS:

Option	GRADE 1			GRADE 2					GRADE 3				GRADE 4			
	A	B	C	X	A	B	C	D	A	B	C	D	A	B	C	D
Remotely powered WD	2				2				2				2			
Self-powered WD		1		1		1				1				1		
Main ATS			ATS 1		ATS 2	ATS 2	ATS 2	ATS 3	ATS 4	ATS 4	ATS 4	ATS 5	ATS 5	ATS 5	ATS 5	ATS 6
Additional ATS							ATS 1				ATS 3				ATS 4	

NOTE: These are the mandatory **MINIMUM** requirements.

Blanks are **OPTIONAL** and may be added as desired.

What does it mean?

Basically it is quite simple

1. Establish (from your risk assessment) which grade the system you are about to install should be.
2. Use this table to choose which combinations of WDs (Warning devices) and ATS (Alarm Transmission Systems) that you believe best meets the client's security requirement. *Don't forget to take into account any insurance requirements!*

For example, at grade 2, you have a CHOICE of applying option **X OR A OR B OR C OR D**; ANY of these may be used within the context of a grade 2 system, to suit what you believe offers the best solution to your client's security needs.

Taking a couple of basic definitions first:

"ATS" ratings refer to the performance criteria specified by prEN50131-1:2004 Table 11. In practice, you will not need to refer to this table, simply to the manufacturer's quoted ratings. Note that not all ratings will be manufactured – simply use the lowest available that meets or exceeds the table 10 requirement.

A **"self-powered" WD** is one that contains a power source – in every day terms, an SAB **or** an SCB (either is acceptable).

"Remotely powered" WDs are those that do NOT include a power source – ie a simple siren or bell incapable of sounding except when driven from the panel.

Taking these choices one at a time:

2X: is a simple "Bells Only" system, requiring simply one "self powered" WD.

2A: is a system including an ATS meeting at least ATS2, plus TWO "remotely powered" WDs.

2B: is similar to A, but requires just one "self-powered" WD.

2C: requires two ATS – or a "dual path" system – meeting the minimum of ATS2 (primary path) + ATS1 (secondary path).

2D: requires only a single ATS, but to the higher ATS3.

At Grade 3 (and 4 for that matter), the A,B,C,D options follow exactly the same pattern, but with higher graded WDs and ATS.

Note that a WD is not mandatory to meet the standards when the C and D options are selected. However, a WD may be added to the system as appropriate.

We understand the ratings of commonly available ATE to be:

1. Digital Communicators meet prEN50131-1 ATS level 2, and are thus suitable for systems installed to grade 2B (or below) only, provided that a test signal (max interval 25 hours) is sent to ARC.

On Castle COM9600 digi-modem, this test signal registers at the ARC as channel "0" – there is NO provision for manually forcing this test.

2. Red Care Classic (eg 3G STU)

Single path system, meets prEN50131-1 ATS level 5.

Although meeting grade 3 requirements, these devices have only 7 channels available and hence are probably useful only at grade 2.

3. RedCare Home

Dual path system, meets prEN50131-1 ATS levels 2 (prim) + 1 (sec).

This system has limited channels available and is NOT Form 175-compliant.

4. RedCare GSM (GSM STU EV)

Dual path system, meets prEN50131-1 ATS levels 5 (prim) + 4 (sec).

This system has 10 channels available *controllable by the CIE*.

Of these only **7** are available through the plug-on pins. Remaining channels must be connected from terminals to the terminal outlets on G3+ End Station.

Form 175 Compliant.

5. DualCom (DualCom PLUS)

Dual path system, meets prEN50131-1 ATS levels 5 (prim) + 4(sec).

This system has 8 channels on base product, upgradeable to 16 with Expander fitted.

Of these only **7** are available through the plug-on pins. Remaining channels and "ATS Test" Link must be connected from terminals to the terminal outlets on G3+ End Station.

Form 175 Compliant.

NOTE: Similar DualCom systems are:

DualCom GPRS – dual-path, meets prEN50131-1 ATS levels 4 (prim) + 3(sec).

DualCom IP – dual-path, meets prEN50131-1 ATS levels 3 (prim) + 2(sec).

6. WebWayOne 2424

Dual path meets prEN509131-1 ATS levels 5 (prim) + ATS 4 (sec).

Serially connected system with choice of path combinations available.

We are currently working on compatibility for this system with Euro-MERiDIAN G range.

SYSTEM COMPLIANCE STATEMENT

For all systems there should be a simple statement that the system is installed to comply with the requirements of PD6662:2004 at grade "x" **and using notification option "y"**.

NOTE: Whilst there may be a requirement to state the fact that a wireless (or hybrid) system is installed, this has no bearing on the use of Table 10, or on the compliance statement required by the standards – and should not be confused with it.

NOTES:

Final selection will need to take into account any insurance requirements.

Option **2X** (bells only) option is specific to the UK and is not permitted elsewhere in Europe.

Where additional items are provided, it is the ATS used that is considered to determine the notification option in use - (eg a system fitted with dual-path signalling AND a self-powered WD is considered to be option 2C plus a WD – NOT 2B with additional ATS).

Not all grades of ATS will be manufactured, so you will simply need to use the next grade up from the MINIMUM requirement stated in table 10.

The ATS ratings quoted above are given in good faith from information available. However, you should be sure to confirm these ratings with the relevant manufacturers so that you have the appropriate documentation available.

Whatever grade of system is specified / installed, additional items can be added without compromising the system. For example, a smoke-generating system can be added. Indeed a speech dialler (although not meeting any of the ATS requirements) can be added to a system of any grade – provided that it additional to, and not a replacement for, the mandatory signalling equipment.

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