

Device communications compatibility chart

Table 1: Devices compatible with 4007ES, 4008, 4010, 4010ES, 4100ES and 4100U IDNet communications, and MAPNET II communications

Model	Description	Model	Description
4090-9101	Class B IDC ZAM	4098-9789, 4098-9775	Sensor Base with LED or relay output
4090-9106	Class A IDC ZAM	4098-9791	4-Wire Sensor Base with supervised relay
4098-9750	In-Duct Sensor Housing without relay	4098-9792, 4098-9776	Standard Sensor Base
4098-9751	In-Duct Sensor Housing with relay	4098-9794	Sounder Base
4098-9755	Duct Sensor Housing without relay	4099-9001, 4099-9004	Addressable Station, Standard
4098-9756	Duct Sensor Housing with relay	4099-9002, 4099-9005	Addressable Station, Breakglass
4098-9780	2-Wire Sensor Base with supervised relay	4099-9003, 4099-9006	Addressable Station, Push
4098-XAD-100, 4098-XAD-110, 4098-XAD-200, 4098-XAD-210	Air aspiration sensor housings. 4098-XAD-100, 4098-XAD-110 are single inlet, 4098-XAD-200, 4098-XAD-210 are dual inlet	4099-9020, 4099-9021	NO-GRIP Single Action Addressable Station

Table 2: Devices with special considerations

Model	Description	Compatibility
4090-9001 4090-9051	Supervised IAMs, 4090-9051 is encapsulated and without LED	4007ES, 4008, 4010, 4010ES, 4100ES, and 4100U IDNet provide T-sense. MAPNET II provides Class B monitoring of N.O. contacts.
4009-9401	TrueAlert Addressable Controller	4010ES, 4100ES, 4100U, and 4100 use RUI, 4010 uses IDNet.
4098-9795 4098-9796	Two Address Sounder Base for sensor Two Address Standard Base 4098-9754	4007ES, 4008, 4010, 4010ES, 4100ES, and 4100U IDNet, and MAPNET II. Two consecutive addresses. Does not provide TrueSense operation. See below for single address applications of 4098-9754.
4098-9754	Photo/Heat Multi-Sensor for above bases	4007ES, 4010ES, 4100ES, and 4100U IDNet. Uses only one address.
4098-9754	Photo/Heat Multi-Sensor, one address for photo, heat, and TrueSense operation	Use with the following sensor bases: 4098-9770, 4098-9771, 4098-9780, 4098-9789, 4098-9791, 4098-9792, 4098-9793, 4098-9775, 4098-9776, 4098-9777, 4098-9794 4098-9797, 4098-9798
4098-9764	Photo/Heat Multi-Sensor	4007ES, 4010ES, 4100ES, and 4100U IDNet. Uses only one address. Use with the following sensor bases: 4098-9780, 4098-9789, 4098-9791, 4098-9792, 4098-9793, 4098-9775, 4098-9776, 4098-9794
4098-9734	High Temperature Heat Sensor	4007ES, 4010ES, and 4100ES
4098-9019, 4098-9020	Addressable Beam Detector	4007ES, 4010ES, and 4100ES
4099-9012, 4099-9015	Addressable Releasing Station, Push	Use with IDNet or MAPNET II Releasing panels only.
4090-9116	IDNet Communications Isolator	4007ES, 4008, 4010ES, 4100ES, and 4100U IDNet
4090-9007	IDNet Signal IAM	4007ES, 4008, 4010ES, 4100ES, and 4100U IDNet requires one address but consumes two unit loads.
4190-9050 4190-9051	4-20 mA AMZ, revision 2.01 firmware	4007ES, 4010ES, 4100ES, and 4100U IDNet, or 4100U and 4100ES MAPNET II Operation. MAPNET II requires one unit load, IDNet requires two unit loads.
4090-9008	Dual Contact Relay IAM	4007ES, 4010ES, 4100ES, or 4100U IDNet, or MAPNET II Operation
4090-9010	8 A Relay IAM	4007ES, 4008, 4010, 4010ES, 4100ES, or 4100U IDNet Operation
VLC-600	TrueAlarm LaserCOMPACT	4007ES, 4010ES, 4100ES, and 4100U IDNet, or MAPNET II Operation

Table 3: Devices compatible with 4007ES, 4010, 4010ES, 4100ES, and 4100U IDNet communications only, except as noted

Model	Description	Model	Description
4009-9201	4009 IDNet NAC Extender (4009 A)	4090-9002	Relay IAM, also for use with 4008
4009-9301		4098-9793, 4098-9777	Isolator Base, also for use with 4008
4090-9105	Class B IDNet Fiber Optic Transmitter	4090-9005	Suppression Release Peripheral (SRP) without enclosure. Uses 2975-9227.
4090-9107	Class A		
4009-9809	IDNet Repeater	4090-9006	SRP with enclosure
4907-9001	LED Message Board		

Table 4: Devices compatible with 4007ES, 4010ES, 4100ES, and 4100U IDNet communications only, except as noted

Model	Description	Model	Description
4090-9117	Addressable Power Isolator	4090-9120	6-Pt. Module, 4 T-Sense inputs, 2 relays
4090-9118	Relay IAM with T-Sense Input	4090-9121	Security Monitor IAM, two unit loads. Not with 4007ES

Table 4: Devices compatible with 4007ES, 4010ES, 4100ES, and 4100U IDNet communications only, except as noted

Model	Description	Model	Description
4090-9119	Relay IAM with unsupervised input	4100-1274	Microphone Mux. Module (internal IAM), 4100ES/4100U only
4098-9770, 4098-9797	CO Sensor Standard Base	4098-9771, 4098-9798	CO Sensor Sounder Base
4098-9772, 4098-9773	CO Sensor Base with 520Hz Sounder		

1. The operation of some models is software revision dependent, see [Software Compatibility Reference](#) for software revision compatibility details for these products.
2. The 4090-9116 IDNet Isolators and 4098-9777 Isolator Bases are not compatible with the 4100-3103 Quad Panel Mount Isolator. Operation is compatible with other panel modules that provide IDNet, IDNet+, IDNet 1+, IDNet 2, or IDNet 2+2 SLCs.
3. For the 4190-9050 and 4190-9051 4-20 ma AMZ and 4090-9007 IDNet Signal IAM, one address is assigned for IDNet communications but the available SLC address count is reduced by two due to supervisory current requirements.
4. Refer to individual product data sheets for listings information.

Table 5: Devices compatible with MAPNET II communications only, refer to Table 13 for other legacy products

Model	Description	Model	Description
2190-9153, 2190-9154	Monitor ZAM, Style D, IDC	2190-9161, 2190-9162	Signal ZAM, Style Y NAC
2190-9155, 2190-9156	Monitor ZAM, Style B, IDC	2190-9163, 2190-9164	Control Relay ZAM, DPDT Contacts
2190-9157, 2190-9158	4-Wire Detector ZAM, IDC	2190-9169, 2190-9170	Line powered isolators, non-addressable
2190-9159, 2190-9160	Signal ZAM, Style Z NAC	2190-9173	2-Point I/O Module

Table 6: Devices compatible with 4007ES, 4010, and 4010ES IDNet communications, 4100ES with IDNet 2 and IDNet 2+2 Modules, and 4100ES and 4100U with 4100-3106 IDNet Expansion Module

Model	Description
4098-9757	QuickConnect2 Sensor, uses 4098-9788 multi-purpose base
4098-9710	QuickConnect Sensor

Device communications compatibility with devices in numerical order

The tables in this section include legacy devices not listed in [Device communications compatibility chart](#). For currently available products see [Device communications compatibility chart](#) and product data sheets for additional information.

Table 7: Communications compatibility, including legacy devices

Model	Description	4007ES, 4010ES, 4100ES, 4100U IDNet, see note	4010 IDNet	4008 IDNet	MAPNET II
2099-9135	Addressable Station, double action push, no Simplex logo	—	—	—	Yes
2099-9761	Addressable Station, double action push	—	—	—	Yes
2099-9795	Addressable Station, single action	—	—	—	Yes
2099-9796	Addressable Station, double action breakglass	—	—	—	Yes
2099-9797	Addressable Station, single action, LOCAL	—	—	—	Yes
2190-9153	Monitor ZAM, Class A, IDC, surface mount	—	—	—	Yes
2190-9154	Monitor ZAM, Class A, IDC, flush mount	—	—	—	Yes
2190-9155	Monitor ZAM, Class B, IDC, surface mount	—	—	—	Yes
2190-9156	Monitor ZAM, Class B, IDC, flush mount	—	—	—	Yes
2190-9157	4-Wire Detector ZAM, Class B IDC, surface mount	—	—	—	Yes
2190-9158	4-Wire Detector ZAM, Class B IDC, flush mount	—	—	—	Yes
2190-9159	Signal ZAM, Class A NAC, surface mount	—	—	—	Yes
2190-9160	Signal ZAM, Class A NAC, flush mount	—	—	—	Yes
2190-9161	Signal ZAM, Class B NAC, surface mount	—	—	—	Yes
2190-9162	Signal ZAM, Class B NAC, flush mount	—	—	—	Yes
2190-9163	Control Relay ZAM, DPDT Contacts, surface mount	—	—	—	Yes
2190-9164	Control Relay ZAM, DPDT Contacts, flush mount	—	—	—	Yes
2190-9169	Line Powered Isolator, non-addressable, surface mount	—	—	—	Yes
2190-9170	Line Powered Isolator, non-addressable, flush mount	—	—	—	Yes
2190-9172	Individual Addressable Module (IAM), includes 2190-9172A larger package	—	—	—	Yes
2190-9173	2-Point I/O Module	—	—	—	Yes
4009-9201	4009 IDNet NAC Extender (4009A), 120 VAC input	Yes	Yes	—	—
4009-9301	4009 IDNet NAC Extender (4009A), 240 VAC input	See Software Compatibility Reference for details	Yes	—	—
4009-9401	TrueAlert Addressable Controller (4009T)	use RUI, not with 4007ES	Yes	—	—
4009-9809	IDNet Repeater. Mounts in 4009A or 4009T only	Yes	Yes	—	—
4090-9001	Supervised IAM with LED	with T-sense	with T-sense	with T-sense	no T-sense
4090-9002	Relay IAM	Yes	Yes	Yes	—
4090-9005	Suppression Release Peripheral (SRP) no enclosure	Yes	w/Rev. 3.01	—	—
4090-9006	SRP with enclosure	See Software Compatibility Reference for details	—	—	—
4090-9007	IDNet Signal IAM, one address	Yes 2 unit loads see Software Compatibility Reference for details	—	2 unit loads	—
4090-9008	Dual Contact Relay IAM	Yes See Software Compatibility Reference for details	—	—	Yes
4090-9010	8 A Relay IAM	Yes	Yes	Yes	—
4090-9051	Supervised IAMs, encapsulated without LED	with T-sense	with T-sense	with T-sense	no T-sense
4090-9101	Class B IDC ZAM	Yes	Yes	Yes	Yes
4090-9105	Class B IDNet Fiber Optic Transmitter	Yes	Yes	—	—
4090-9106	Class A IDC ZAM	Yes	Yes	Yes	Yes
4090-9107	Class A IDNet Fiber Optic Transmitter	Yes	Yes	—	—
4090-9116	IDNet Communications Isolator, see note.	Yes	—	Yes	—
4090-9117	Addressable Power Isolator	Yes	—	—	—
4090-9118	Relay IAM with T-Sense Input	Yes	—	—	—
4090-9119	Relay IAM with unsupervised input	See Software Compatibility Reference for details	—	—	—
4090-9120	6-Pt. Module, 4 T-Sense inputs, 2 relays	—	—	—	—
4090-9121	Security Monitor IAM, 2 unit loads	Yes Not with 4007ES	—	—	—
4098-9702	Duct Sensor for 4098-9701 Sensor Head 4-wire	—	—	—	Yes

Table 7: Communications compatibility, including legacy devices

Model	Description	4007ES, 4010ES, 4100ES, 4100U IDNet, see note	4010 IDNet	4008 IDNet	MAPNET II
4098-9703	Duct Sensor for 4098-9701 Sensor Head 2-wire (2120 CDT)	—	—	—	Yes
4098-9704	In-Duct Sensor for 4098-9701 Sensor Head 4-wire	—	—	—	Yes
4098-9705	In-Duct Sensor for 4098-9701 Head 2-wire (2120 CDT)	—	—	—	Yes
4098-9706	Duct Sensor for 4098-9701 Head 4-wire with 4 in. base	—	—	—	Yes
4098-9707	Duct Sensor for 4098-9701 Head 2-wire with 4 in. base (2120 CDT)	—	—	—	Yes
4098-9708	In-Duct Sensor for 4098-9701 Head 4-wire with 4 in. base	—	—	—	Yes
4098-9709	In-Duct Sensor for 4098-9701 Head 2-wire with 4 in. base (2120 CDT)	—	—	—	Yes

Note: IDNet Isolators and Isolator Bases are not compatible with the 4100-3103 Quad Panel Mount Isolator.

Table 8: Communications compatibility, including legacy MAPNET II

Model	Description	4007ES, 4010ES, 4100ES, 4100U IDNet, see note	4010 IDNet	4008 IDNet	MAPNET II
4098-9734	High Temperature Heat Sensor	Yes Not with 4100U, See Software Compatibility Reference for details	—	—	—
4098-9750	In-Duct Sensor Housing without relay	Yes	Yes	Yes	Yes
4098-9751	In-Duct Sensor Housing with relay	Yes	Yes	Yes	Yes
4098-9752	Legacy Duct Housing for 4098-9714 without relay (2120 CDT)	Yes	Yes	Yes	Yes
4098-9753	Legacy Duct Housing for 4098-9714 with relay	Yes	Yes	Yes	Yes
4098-9710	QuickConnect sensor	Yes	Yes	—	—
4098-9757	QuickConnect2 Sensor, uses 4098-9788 base	See Device communications compatibility chart for compatibility details	—	—	—
4098-9780	2-Wire Sensor Base with supv. relay	Yes See Software Compatibility Reference for details	Yes	Yes	Yes
4098-9781	Sensor Base 6 3/8 in.	—	—	—	Yes
4098-9782	Sensor Base 6 3/8 in. with sounder	—	—	—	Yes
4098-9783	Sensor Base 6 3/8 in. with remote relay driver	—	—	—	Yes
4098-9784	Standard Sensor Base 4 in.	Yes	Yes	Yes	Yes
4098-9785	Sensor Base 4 in. with conn. For remote alarm ind. Or relay	Yes	Yes	Yes	Yes
4098-9786	Sounder Base 6 3/8 in. with conn. For remote alarm ind. or relay	Yes	Yes	Yes	Yes
4098-9787	Sensor Base 4 in. with supv. remote relay and remote ind. or relay	Yes	Yes	Yes	Yes
4098-9789, 4098-9775	Sensor Base, remote LED or unsupervised relay	Yes	Yes	Yes	Yes
4098-9791	4-Wire Sensor Base, remote LED or relay, and supv. remote relay	Yes	Yes	Yes	Yes
4098-9792, 4098-9776	Standard Sensor Base	Yes	Yes	Yes	Yes
4098-9793, 4098-9777	Isolator Base, see 4100U/4100ES note	Yes	Yes	Yes	—
4098-9794	Sounder Base	Yes	Yes	Yes	Yes
4098-9795	Two Address Sounder Base for 4098-9754	Yes	Yes	Yes	Yes
4098-9796	Two Address Standard Base for 4098-9754	Yes	Yes	Yes	Yes
4098-9770, 4098-9797	CO Sensor Standard Base	Yes See Software Compatibility Reference for details	—	—	—
4098-9771, 4098-9798	CO Sensor Sounder Base	—	—	—	—
4098-9772, 4098-9773	CO Sensor Base with 520Hz Sounder	—	—	—	—
4098-9019, 4098-9020	Addressable Beam Detector	Yes 4007ES, 4010ES, 4100ES	—	—	—
4099-9001, 4099-9004	Addressable Station, Standard	Yes	Yes	Yes	Yes
4099-9002, 4099-9005	Addressable Station, Breakglass	Yes	Yes	Yes	Yes

Table 8: Communications compatibility, including legacy MAPNET II

Model	Description	4007ES, 4010ES, 4100ES, 4100U IDNet, see note	4010 IDNet	4008 IDNet	MAPNET II
4099-9003, 4099-9006	Addressable Station, Push	Yes	Yes	Yes	Yes
4099-9012, 4099-9021	Addressable Releasing Station, Push	Yes not 4007ES	Yes	—	Yes
4099-9020, 4099-9015	NO-GRIP Single Action Addressable Station	Yes	Yes	Yes	Yes
4100-1274	Microphone Multiplex Module, internal IAM	Yes 4100ES and 4100U only, see Software Compatibility Reference for details	—	—	—
4190-9050	4-20 mA AMZ, revision 2.01 firmware, surface mount	2 unit loads	—	—	1 unit load
4190-9051	4-20 mA AMZ, revision 2.01 firmware, flush mount		—	—	
4907-9001	LED Message Board	Yes	Yes	—	—
VLC-600	TrueAlarm LaserCOMPACT; emulates 4-20 mA AMZ	Yes	—	—	Yes

Note: IDNet Isolators and Isolator Bases are not compatible with the 4100-3103 Quad Panel Mount Isolator.

4100ES/4010ES/4007ES/4100U multi-point device point allocations

Note: Points and sub-points required to be mapped over the Network are designated as **Public** in the programmer. See notes 1 and 2 at the end of Table 15 for I/O point usage and public points usage guidelines.

Table 9: 4009 IDNet NAC Extender (4009A)

Model	Description	Point type	4007ES, 4010ES, 4100ES, 4100U I/O point usage	Public points usage
4009-9201	4009 IDNet NAC Extender, 120 VAC input	4009A4	4: 1 per NAC	Up to 5: 1 per NAC, 1 for trouble
4009-9301	4009 IDNet NAC Extender, 240 VAC input			
4009-9807	Additional 4 circuit NAC, added to 4009-9201 or 4009-9301	4009A8	8: 1 per NAC	Up to 9: 1 per NAC, 1 for trouble

Table 10: Addressable I/O devices

Model	Description	Point type	4007ES, 4010ES, 4100ES, 4100U I/O point usage	Public points usage
4090-9118	Relay IAM with T-Sense Input	TRIAM	2: 1 for relay, 1 for input	Up to 3: 1 for relay, 1 for input, 1 for trouble
4090-9119	Relay IAM with feedback (unsupervised input)	FRIAM	1: 1 point per Relay IAM	Up to 3: 1 for relay, 1 for input, 1 for trouble
4090-9120	6-Pt. Module, 4 T-Sense inputs, 2 relays	MLPTIO	6: 1 per relay, 1 per input	Up to 7: 1 per relay, 1 per input, 1 for trouble

Table 11: TrueAlarm Sensor Bases with 4098-9754, Photo/Heat, TrueSense Multi-Sensor

Model	Description	Point type	Panel I/O point usage		Public points usage
			4007ES, 4010ES, 4100ES	4100U	
4098-9792, 4098-9776	Standard Sensor Base, no outputs	COMBO	1	2: 1 for smoke, 1 for heat	Up to 4: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble
4098-9789, 4098-9775	Sensor Base with remote LED or unsupervised relay, on with alarm				
4098-9780	2-Wire Sensor Base	RCOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for relay
4098-9791	4-Wire Sensor Base Supports remote LED or relay, and supervised remote relay				
4098-9793, 4098-9777	Isolator Base	ICOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for isolator
4098-9794	Sounder Base	SCOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for sounder

Table 12: TrueAlarm Sensor Bases with 4098-9764, Photo/Heat, TrueSense Multi-Sensor

Model	Description	Point type	Panel I/O points usage		Public points usage
			4007ES, 4010ES, 4100ES	4100U	
4098-9792	Standard Sensor Base, no outputs	COMBO	1	2: 1 for smoke, 1 for heat	Up to 4: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble
4098-9776					
4098-9789					
4098-9775					
4098-9791	4-wire sensor relay base	RCOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for relay
4098-9780	2-wire sensor relay base				
4098-9793	Isolator base	ICOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for isolator
4098-9794	Sounder base	SCOMBO	1	2: 1 for smoke, 1 for heat	Up to 5: 1 for smoke, 1 for heat, 1 for correlation, 1 for trouble, 1 for sounder

Table 13: TrueAlarm CO Sensor Standard Base 4098-9770, 4098-9797 with compatible sensors

Sensor model	Description	Point Type	Panel I/O point usage		Public points usage
			4007ES, 4010ES, 4100ES	4100U	
4098-9714, 4098-9774	Photoelectric Smoke Sensor	MCOPS	1	2: 1 for photo, 1 for CO	Up to 6: 1 for trouble reporting, 1 for sounder (MSOUND) 1 for photo (MPHOTO), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9754, 4098-9779	Multi-Sensor, Photoelectric and Heat Sensing	MCOPH	1	3: 1 for photo, 1 for heat, 1 for CO	Up to 6: 1 for trouble reporting, 1 for photo (MPHOTO), 1 for heat (MHEAT), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9733, 4098-9778	Heat Sensor	MCOHS	1	2: 1 for heat, 1 for CO	Up to 5: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for heat (MHEAT), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE),
4098-9717	Ionization Smoke Sensor	MCOI	1	2: 1 for ion, 1 for CO	Up to 4: 1 for trouble reporting, 1 for ion (MION), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE)

4010ES/4100U/4100ES multi-point device point allocations

See notes 1 and 2 at the end of Table 15 for I/O point usage and public points usage guidelines.

Table 14: TrueAlarm CO Sensor Sounder Base 4098-9771, 4098-9798 with compatible sensors

Sensor model	Description	Point type	Panel I/O point usage		I/O point usage
			4007ES, 4010ES, 4100ES	4100U	
4098-9714, 4098-9774	Photoelectric Smoke Sensor	MCOPS	1	2: 1 for photo, 1 for CO	Up to 6: 1 for trouble reporting, 1 for sounder (MSOUND) 1 for photo (MPHOTO), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9754, 4098-9779	Multi-Sensor, Photoelectric and Heat Sensing	MCOPHS	1	3: 1 for photo, 1 for heat, 1 for CO	Up to 7: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for photo (MPHOTO), 1 for heat (MHEAT) 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9733, 4098-9778	Heat Sensor	MCOHS	1	2: 1 for heat, 1 for CO	Up to 5: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for heat (MHEAT), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE),
4098-9717	Ionization Smoke Sensor	MCOIS	1	2: 1 for ion, 1 for CO	Up to 5: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for ion (MION), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE)

Table 15: TrueAlarm CO Sensor Base with Sounder 4098-9772 and 4098-9773 with compatible sensors

Sensor model	Description	Point type	Panel I/O point usage		I/O point usage
			4007ES, 4010ES, 4100ES	4100U	
4098-9714, 4098-9774	Photoelectric Smoke Sensor	MCOPS	1	2: 1 for photo, 1 for CO	Up to 6: 1 for trouble reporting, 1 for sounder (MSOUND) 1 for photo (MPHOTO), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9754, 4098-9779	Multi-Sensor, Photoelectric and Heat Sensing	MCOPHS	1	3: 1 for photo, 1 for heat, 1 for CO	Up to 7: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for photo (MPHOTO), 1 for heat (MHEAT) 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE), 1 to select multi-point correlation: false alarm reduction (MACOFALSE), or faster detection (MACOFAST), or correlation off (MAOFF)
4098-9733, 4098-9778	Heat Sensor	MCOHS	1	2: 1 for heat, 1 for CO	Up to 5: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for heat (MHEAT), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE),
4098-9717	Ionization Smoke Sensor	MCOIS	1	2: 1 for ion, 1 for CO	Up to 5: 1 for trouble reporting, 1 for sounder (MSOUND), 1 for ion (MION), 1 for CO gas (MCOGAS), 1 for CO fire (MACOFIRE)

Note:

- 4100ES I/O point usage = 2500 max
4100U I/O point usage = 2000 max.
4010ES I/O point usage = 1000 max.
Note that I/O point and device capacity may be different. Consult your Simplex product supplier for application assistance. 4007ES Point Usage depends on options selected, 100, 175, or 250, refer to 4007ES documentation for details.
- 4100ES/4100U public points usage = 2500 max per 4100ES/4100U to other nodes. 4007ES and 4010ES public points usage. You can make all 4007ES and 4010ES points public to other nodes.

Table 16: MAPNET II Device Panel compatibility

Model	Description	4100-3102 MAPNET II module	4100, 4100+, 4120	4020	UT*	2120 CDT**					
2099-9135	Addressable Station, double action push, no Simplex logo	Yes	Yes			Yes					
2099-9761	Addressable Station, double action push										
2099-9795	Addressable Station, single action										
2099-9796	Addressable Station, double action breakglass										
2099-9797	Addressable Station, single action, LOCAL										
2190-9153	Monitor ZAM, Class A, IDC, surface mount										
2190-9154	Monitor ZAM, Class A, IDC, flush mount										
2190-9155	Monitor ZAM, Class B, IDC, surface mount										
2190-9156	Monitor ZAM, Class B, IDC, flush mount										
2190-9157	4-Wire Detector ZAM, Class B IDC, surface mount										
2190-9158	4-Wire Detector ZAM, Class B IDC, flush mount										
2190-9159	Signal ZAM, Class A NAC, surface mount										
2190-9160	Signal ZAM, Class A NAC, flush mount										
2190-9161	Signal ZAM, Class B NAC, surface mount										
2190-9162	Signal ZAM, Class B NAC, flush mount										
2190-9163	Control Relay ZAM, DPDT Contacts, surface mount										
2190-9164	Control Relay ZAM, DPDT Contacts, flush mount										
2190-9172	IAM, includes 2190-9172A										
2190-9173	2-Point I/O Module										
4090-9008	Dual Relay IAM						Yes				Yes, but without latch or track selection
4090-9001	Supervised IAM with LED, without T-sense										
4090-9051	Supervised IAMs; encapsulated without LED, without T-sense										
4090-9101	Class B IDC ZAM	Yes				Yes					
4090-9106	Class A IDC ZAM										
4098-9702	Duct Sensor for 4098-9701 Sensor Head 4-wire										
4098-9703	Duct Sensor for 4098-9701 Sensor Head 2-wire										
4098-9704	In-Duct Sensor for 4098-9701 Sensor Head 4-wire										
4098-9705	In-Duct Sensor for 4098-9701 Head 2-wire										
4098-9706	Duct Sensor for 4098-9701 Head 4-wire with 4 in. base										
4098-9707	Duct Sensor for 4098-9701 Head 2-wire with 4 in. base										
4098-9708	In-Duct Sensor for 4098-9701 Head 4-wire with 4 in. base										
4098-9709	In-Duct Sensor for 4098-9701 Head 2-wire with 4 in. base										
4098-9750	In-Duct Sensor Housing without relay						Yes				Yes
4098-9751	In-Duct Sensor Housing with relay						Yes				—
4098-9754	Photo/Heat Multi-Sensor used with dual address bases						Yes				—
4098-9755	Duct Sensor Housing without relay						Yes				Yes
4098-9756	Duct Sensor Housing with relay						Yes				—
4098-9780	2-Wire Sensor Base with supv. relay						Yes				—
4098-9781	Sensor Base 6 3/8 in.						Yes				Yes
4098-9782	Sensor Base 6 3/8 in. with sounder										
4098-9783	Sensor Base 6 3/8 in. with remote relay driver										
4098-9784	Standard Sensor Base 4 in.										
4098-9785	Sensor Base 4 in. with conn. For remote alarm ind. or relay										
4098-9786	Sounder Base 6 3/8 in. with conn. For remote alarm ind. or relay										
4098-9787	Sensor Base 4 in. with supv. remote relay and remote ind. or relay										
4098-9789, 4098-9775	Sensor Base, remote LED or unsupervised relay										
4098-9791	4-Wire Sensor Base with supv. relay	Yes				—					
4098-9792, 4098-9776	Standard Sensor Base	Yes				Yes					
4098-9794	Sounder Base	Yes				—					
4098-9795	Two Address Sounder Base for 4098-9754	Yes				—					
4098-9796	Two Address Standard Base for 4098-9754	Yes				—					

Table 16: MAPNET II Device Panel compatibility

Model	Description	4100-3102 MAPNET II module	4100, 4100+, 4120	4020	UT*	2120 CDT**
4099-9001	Addressable Station, Standard	Yes	Yes	-	-	Yes
4099-9002	Addressable Station, Breakglass					
4099-9003	Addressable Station, Push					
4190-9050	4-20 mA AMZ, revision 2.01 firmware, surface mount, 1 unit load	Yes	Yes with revision 8 or higher	-	-	-
4190-9051	4-20 mA AMZ, revision 2.01 firmware, flush mount, 1 unit load	Yes		-	-	-
VLC-600	TrueAlarm LaserCOMPACT, emulates 4-20 mA AMZ	Yes	Yes with revision 8.01 or higher	-	-	-

* UT = Universal Transponder, see data sheet S4100-0007.

** 2120 CDT = Communicating Device Transponder with MAPNET II and TrueAlarm software.

IDNet Communications

What does it mean?

IDNet is an acronym for Individual Device Network. The IDNet design is the latest generation of addressable device communications, improving upon the basic MAPNET II communications protocol.

Where is it used?

IDNet communications are provided by Simplex 4010, 4007ES, 4008, 4010ES, 4100ES, and 4100U Fire Alarm Control Units (FACU). In addition to IDNet/MAPNET II addressable devices, IDNet communications adds new devices such as the IDNet Isolator base, the 4009 IDNet NAC Extender, and the Security IAM. 4007ES, 4010ES, 4100ES, and later versions of 4100U software (revision 11 and higher) also communicate with multi-point relays and the multi-sensor. Different FACUs may provide different device compatibility.

What does it do?

The operation is similar to MAPNET II but there are significant differences. The IDNet protocol and hardware enhancements support up to 250 addressable devices on a single wire pair and can support additional device types and different operations. The 4008 Fire Alarm Control FACU provides up to 200 addressable device support. The 4007ES is standard with 100 devices and optionally up to 250.

How does it work?

Basic operation is similar to that of MAPNET II but with an expanded capability that requires a different control FACU to decode the additional device types and operations available with IDNet communications.

What is the difference between 4010 IDNet and 4007ES, 4010ES, 4100ES, and 4100U IDNet operation?

The basic communications protocol of IDNet operation is similar, just as RS-232 or RS-485 is similar. However, even though the IDNet communications protocol is similar, not all control FACUs can recognize all addressable devices. For compatibility reasons, there is a distinction between 4008 and 4010, and 4007ES, 4010ES, 4100ES, and 4100U IDNet operation.

What is the difference between 4010 IDNet and 4008 IDNet operation?

The 4008 Addressable FACU provides a unique set of features. It is for smaller applications and only supports two photoelectric sensitivity levels. However, it is capable of controlling the 4090-9116 IDNet Communications Isolator, and it is compatible with the 4090-9007 IDNet Signal IAM.

What is IDNet 2 and IDNet 2+2 operation?

IDNet 2 describes 4100ES and 4010ES FACUs that provide a 250 point electrically isolated IDNet channel with a two short circuit isolating output loop module. This module provides improved noise immunity and allows IDNet circuits to use existing unshielded and untwisted wiring in conduit with other fire alarm circuits. The communications scheme is standard IDNet format. IDNet 2 output is compatible with QuickConnect and QuickConnect2 sensors, Isolator bases, and IDNet Isolators.

IDNet 2+2 describes 4100ES and 4010ES FACUs that provide a 250 point isolated IDNet channel with a **four** short circuit isolating output loop module. The communications scheme is standard IDNet format and compatibility is the same as IDNet 2 operation.

What is IDNet+ operation?

"IDNet+" describes an electrically isolated IDNet SLC with a single output loop and with improved noise immunity as provided by the 4007ES, and by 4010ES FACUs without an IDNet 2 SLC.

IDNet+ was originally used to describe the isolated IDNet SLC provided by the 4100-3107 module for 4100ES and 4100U FACUs. 4100-3107 provided four isolated output loops with 246 addressable point capacity. This module is not needed for 4100ES FACUs with IDNet 2 or IDNet 2+2 SLC modules.

What is IDNet 1+ operation?

IDNet 1+ describes the original electrically isolated IDNet SLC single loop output of the 4100ES with EPS. IDNet 1+ has been replaced by the IDNet 2 and IDNet 2+2 modules.

Refer to specific FACU data sheets for additional information.

MAPNET II Communications

What does it mean?

MAPNET is an acronym for Multi-Application Peripheral NETWORK. MAPNET II was introduced as an improved version of MAPNET (I) in 1991. The improvements included electrical design changes that impacted both the transmit and receive circuits and provided better electrical transient immunity and overall improved performance.

Where is it used?

Availability includes system models 4020, 4100, 4120, and 4100U or 4100ES, and with 2120 Systems using the CDT (Communicating Device Transponder). All MAPNET II transceiver control modules only communicate with MAPNET II compatible addressable devices. However, some addressable devices can automatically adapt to communicate with either MAPNET II or IDNet communication protocols.

What does it do?

MAPNET II is an addressable communications protocol that provides power and half-duplex communications over a single pair of wires for up to 127 addressable devices. Half-duplex communications are bi-directional, but occur in one direction at a time. Information can include status, for example: normal, trouble, alarm, abnormal, and commands such as turn on or off a relay, reset a ZAM, or activate a sounder base. Additionally, TrueAlarm analog sensor information is communicated through MAPNET II communications, or IDNet communications.

How does it work?

The control FACU sends out polling commands for status monitoring or individual device commands. This occurs by imposing voltage variations on a steady DC level. When the polling stops, the DC level is held high and each responding device answers for each unique address by switching a resistor onto the DC circuit. This causes data to be readable at the FACU. The steady DC level provides power for the MAPNET II communications receiver circuit. For some low power devices, such as basic smoke/heat sensors and IAMs, the steady DC level can power the entire device meaning only a single wire pair is required.

Software Compatibility Reference

Table 17: Software compatibility reference

Model	Description	Software revision requirements
4009-9201	4009 IDNet NAC Extender (4009A)	Use with 4100U requires software revision 11 or higher.
4009-9301		
4090-9005	Suppression Release Peripheral (SRP) without enclosure, uses 2975-9227	Requires 4007ES Revision 3.04 software or higher, or 4010 Revision 3.01 software or higher, or 4100U Revision 11.05 software or higher, or 4010ES/4100ES.
4090-9006	SRP with Enclosure	
4090-9007	IDNet Signal IAM	Use with 4100U requires software revision 11.11.01 or higher.
4090-9008	Dual Contact Relay IAM	Use requires IDNet firmware revision 3.12.01 or higher.
4090-9118	Relay IAM with T-Sense Input	Use with 4100U requires revision 11.0 software or higher.
4090-9119	Relay IAM with unsupervised input	
4090-9120	6-Point Module, 4 T-Sense inputs, 2 relays	
4098-9754, 4098-9764, 4098-9779	Photo/Heat Multi-Sensor	
4098-9019, 4098-9020	Addressable Beam Detector	Please refer to data sheet S4098-0049 for detailed compatibility information.
4098-9797	CO Sensor Standard Base, 5 Year CO sensor life	Use with 4100ES and 4100U at software revision 12.05 or higher, models now superseded by 10 year life CO sensors.
4098-9798	CO Sensor Sounder Base, 5 Year CO sensor life	
4098-9780	2-Wire Sensor Base with Supervised Relay	Use requires IDNet firmware revision 3.12.04 or higher.
4098-9770	CO Sensor Standard Base, 10 Year CO sensor life	Use with 4007ES, and 4100ES or 4010ES at software revision 2.01.02 or higher. Note: Use with 4100U only provides 5 year CO sensor life, and requires 4100U software at revision 12.05 or higher.
4098-9771	CO Sensor Sounder Base, 10 Year CO sensor life	
4098-9772	CO Sensor Base with 520 Hz Sounder, 10 Year CO sensor life	
4098-9773	CO Sensor Base with 520 Hz Sounder, 10 Year CO sensor life	
4100-1274	Microphone Multiplex Module, with internal IAM	Use with 4100ES.
4907-9007	LED Message Board	Use with 4100U at software revision 12.05.04 or higher and IDNet/SPS at revision 3.11.03 or higher.
4098-9734	High Temperature Heat Sensor	Use with 4007ES, 4010ES or 4100ES software revision 3.03.05 or higher and IDNet2 or IDNet2+2 at software revision 1.02 or higher. Use with the following IDNet modules revision 3.12.12 or higher: 250-point IDNet, SPS, IDNet+, IDNet1+, 4010ES MSS2. Not compatible with 4100U.

