LONGSPAN

LONG RANGE ETHERNET & POE



BASIC DESCRIPTION

- Extends Ethernet and POE over exceptional distances over regular network cable
- Point to point; extension is over a single unbroken length of cable
- POE (base and camera side) and non-POE models available
- Can use POE or our 57V power supply

KEY POINTS

- Full 100Base-T Ethernet at over 800 metres
- Full 10Base-T Ethernet at over 1 Kilometre
- Full 25 watts POE Plus at 600 metres
- 1-pair mode allows upgrade of analogue UTP
- Fully self-configuring with diagnostic LED feedback



FEATURE	ADVANTAGE	BENEFIT		
Extends Ethernet	Overcomes constraints on camera or switch location. No need for edge switches.	Enables flexible camera positioning. Reduces time and expense of installing additional network equipment.		
Extends POE	All power can be centrally sourced and controlled. No mains wiring required for remote equipment. Removes restrictions on device location.	Reliability of UPS backup and easy resetting. Saves time and cost of electrical installation. Cameras can be located optimally and easily moved.		
Point-to-point	No buried or exposed equipment. No cable pulling concerns. Allows termination to patch panels and outlets where required by code.	Simplifies installation. Reduces time and risk of installation. Saves cost of equipment.Reduces failure risk. Allows conventional, compliant wiring.		
Uses conventional cable	Regular Cat 5e, Cat 6 etc can be installed or re-used.	Low cable cost (Cat 5e usually fine), familiarity, upgrade path to Gigabit.		
Full bandwidth	No restrictions on network throughput.	Camera connection is guaranteed to function correctly and predictably.		
1-pair mode	Can deliver a full-rate connection over a single twisted pair. Supports Cat 3 and other cable types.	Low cost upgrade from analogue to digital in legacy analogue UTP installations. Enables re-use of other legacy cables, even phone wiring, saving time and cost.		
Self-configuring	No need to set DIP switches or insert paperclips. Less user knowledge required.	Reduces installation time. Best connection performance. Reduces training and support.		
SafeView™ LEDs	Confirms POE power available, remote link and POE status, and any errors.	Eliminates risk of poor performance over unknown cable types, reduces time accessing equipment or solving problems.		
Extended temperature	Operates from -40C to 70C.	Allows installation in more environments. Increased reliability margin.		
Rack mountable	24 units can be mounted per 1U. Versatile PSU options.	Maximised rack density. Installation can be tailored to site.		



ADVANTAGES OVER THE COMPETITION

- Distance other UTP extenders are in the 300-600m range
- Bandwidth most competitors use technologies that throttle bandwidth as range increases
- Power level our power vs range is many times better than the competition.
- The 57V power supply is a quick option to upgrade and actually saves cost over POE injectors & switches
- Automatic configuration competitors use DIP switches to match the rate, pairs, or set master/ slave, or even require pairing using a paperclip-accessed button
- Feedback LEDs no-one has this and it eliminates any concerns with power delivery over unknown cable distance and quality. Knowing what is connected remotely helps too
- Temperature range many competitors do not offer our extreme temperature spec
- Mounting options rack density in particular is a key requirement for some customers

Available Q4 2012

LONGSPAN Data Range

RATE	CAT 6	CAT 5e	1 - PAIR (typ)
100 Base-T	820m (2700ft)	690m (2250ft)	300m (1000ft)
10 Base-T	1050m (3500ft)	950m (3100ft)	900m (3000ft)

LONGSPAN POE Range

CAMERA POWER	802.3af POE SWITCH		802.3at POE PLUS SWITCH		VERACITY POWER SUPPLY	
	CAT 6	CAT 5e	CAT 6	CAT 5e	Cat 6	CAT 5e
5 watts	1050m	950m	1050m	950m	1050m	950m
10 watts	600m	450m	1050m	950m	1050m	950m
15 watts	n/a	n/a	700m	550m	1000m	800m
20 watts	n/a	n/a	500m	350m	750m	600m
25 watts	n/a	n/a	n/a	n/a	600m	450m

NOTES: Range is for typical 24AWG Cat 5e or 23AWG Cat 6, 4-pair UTP. For other cables types or any installations over 600 metres length, consult Veracity for recommendations or test on site. Distances may be increased by connecting multiple links in series. Data rate at full range stated:100Base-T = 200Mbps, 10Base-T = 20Mbps