

LonWorks® Cables

for Building Automation

LonWorks® (Local Operating Network) The Lon platform was created by Echelon Corporation in 1988, since then it has become the world's leading technology for networking building services devices. Lon is an international standard "Control Network" protocol (ISO 14908) as well as an American, Chinese and European standard for open data communication in building automation, controls & building management. Lon can be networked over twisted pair, power lines, fibre optic or RF.

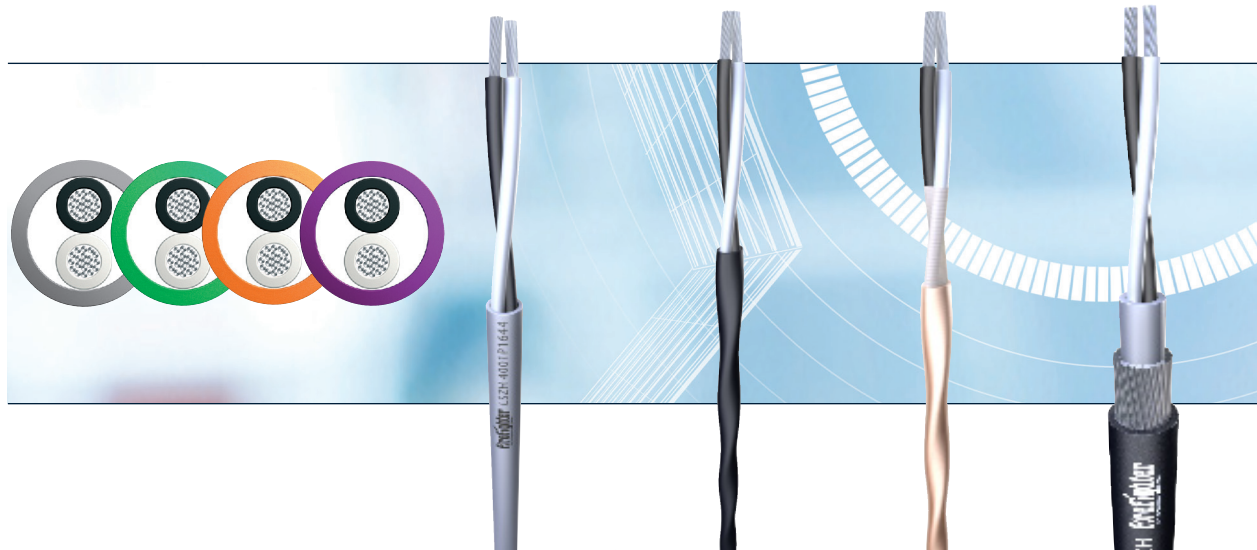
Lon is supported worldwide by more than 4,000 companies representing 80% of the building controls market with more than 100,000,000 devices installed globally in a variety of sectors including motorway lighting, building lighting control, HVAC systems, security systems, fire detection and many more.

Lon open protocol technology frees clients from reliance on a single source of supply, they can select the best lighting controls, detectors, HVAC and access – control units leaving them confident that they will have seamless integration with other building services systems.

Technically Lon is superior to other protocols on the market. Lon is eight times faster than KNX (EIB) – Lon's 78,000 bits per second (bps) compares to KNX's 9,600 bps – and incorporates acknowledgement handshakes which are not generated by KNX devices. Lon technology enables an entire system database to be created by reading back from the network devices – a feature not offered by any other technology. Coupled with distributed intelligence which guarantees no single point of failure, it is no surprise that Lon is the technology of choice for large, integrated projects where accurate, high-speed communication is important.



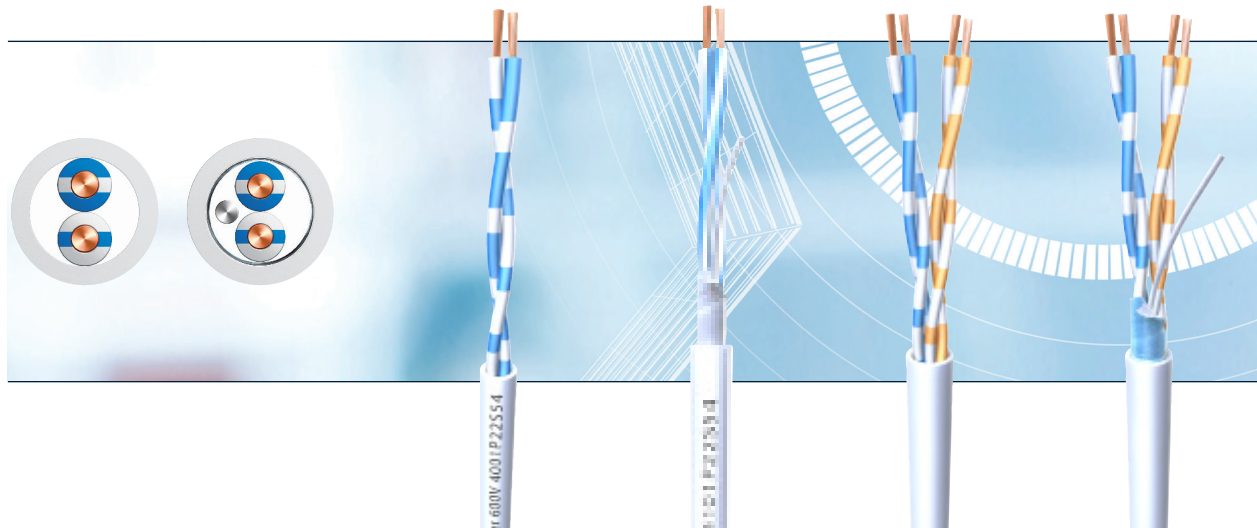
LonWorks® Cable Guide 1x2x16awg



Part Number		4001P1644	6101602THD	4001P1616	144001P1644
Construction		1 x 2 x 16awg	1 x 2 x 16awg	1 x 2 x 16awg	1 x 2 x 16awg
Overall Diameter	mm	6,70	5,70	5,46	10,76
Conductor		19/0,30... Tinned Copper	19/0,30... Tinned Copper	19/0,30... Tinned Copper	19/0,30... Tinned Copper
Insulation		LSZH FireFighter®	SR-PVC	ETFE Tefzel®	LSZH FireFighter®
Colour Code		■ □	■ □	■ □	■ □
Inner Jacket		-	-	-	LSZH FireFighter®
Armour		-	-	-	DataGuard® (SWA)
Outer Jacket		LSZH FireFighter®	HDPE	ETFE Tefzel®	LSZH FireFighter®
Outer Jacket Colours		■ ■ ■ ■	■	□	■
Electrical Characteristics					
Capacitance (nom.)	pF/m			108	
Conductor DC Resistance (nom.)	Ω/km			14,7	
Inductance (nom.)	μH/m			0,56	
Voltage Rating	V			600	
Test Voltage (core/core)	V dc 1 min.			2000	

LonWorks®

Cable Guide nx2x22awg



Part Number		4001P22S54	4101P22S54	4002P22S54	4102P22S54
Construction		1 x 2 x 22 awg	1 x 2 x 22 awg	2 x 2 x 22 awg	2 x 2 x 22 awg
Overall Diameter	mm	4,50	5,60	5,20 ± 0,4	7,50
Conductor		Solid Plain Copper	Solid Plain Copper	Solid Plain Copper	Solid Plain Copper
Insulation		PE	PE	PE	PE
Colour Code		▣ ▣	▣ ▣	▣ ▣ / ▣ ▣	▣ ▣ / ▣ ▣
Drain Wire		-	Solid Tinned copper		Solid Tinned copper
Screen		Unscreened	Alulamine foil	Unscreened	Alulamine foil
Outer Jacket		LSZH FireFighter®			
Outer Jacket Colours		White			
Electrical Characteristics					
Impedance (nom.)	Ω	100	100	100	100
Velocity of Propagation (nom.)	%	68	68	68	68
Conductor DC Resistance	Ω/km	55	55	55	55
Capacitance	pF/m	46	80	46	40
Shield DC Resistance	Ω/km	-	34	-	17
Attenuation (20 MHz)	$dB/100m$	6,9	7,8	6,9	7,8